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Touchmonitor Products Catalog

Industrial

Retail

Medical

Gaming

Telecom

Hospitality

Financial

Healthcare

Celebrating Over 30 Years of Touch Industry Leadership

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The Touch Monitor is a monthly electronic newsletter that keeps you informed of the latest product announcements, driver updates, technology briefs, case studies, and services from Elo TouchSystems.

As a subscriber, The Touch Monitor is delivered directly to your mailbox each month through e-mail. Depending upon the capabilities of your e-mail application, you will receive The Touch Monitor in either text or HTML format. The HTML format takes full advantage of the Web to provide hyperlinks to articles and associated items, as well as providing attractive, complementary images of products and services.

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Spring 2003

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Benefits of Touch Interface

Many years ago, touchscreens were an exotic, expensive interface for demanding applications like air-traffic and nuclear power-plant control. Not anymore! Companies across a broad spectrum of industries have successfully harnessed the power of touch for a wide variety of applications. Yet the essential benefits provided by touch technology remain unchanged.

Fast, faster, fastest

Touchscreens provide fast access to any and all types of digital media, with no text-bound interface getting in the way. It takes time for the user to grab a mouse or use a keyboard or trackball and coordinate it with what needs to be activated on the display. Faster input can mean better customer service in restaurants, hotels, movie theaters, and retail stores, which results in increased customer loyalty. In other cases, such as in-vehicle control or security equipment, being even one second faster can make all the difference.

Touch makes everyone an expert

Reaching out for what you want is an instinctive gesture. Using touch is just as simple: you simply point at what you want. Although some people still shy away from computer keyboards, mice, or trackballs, there is no hesitation when they can just touch a screen. Users feel comfortable that they cannot "do anything wrong"; they instinctively understand how to use the interface. Touchscreen systems make everyone an "expert user" from the first touch—whether it's a person consulting a kiosk, a worker controlling an industrial process, a nurse entering a patient's information, or a waiter entering an order.

Reduced costs

Using a touch interface can effectively increase operator accuracy, reduce training time, and improve overall operational efficiencies, thus keeping costs down. In the retail environment, for example, a properly designed touch interface can improve each operator's accuracy, while maintaining optimum checkout speeds. Users can respond quickly without making significant errors. Also, touch-based point-of-sale (POS) systems streamline the returns and refunds process by reducing the time it takes a customer to return merchandise; they also improve loss-prevention management. In addition, compared to traditional training methods, using touchscreens can drastically reduce training time, since touch technology is intuitive and requires no special skills to learn. Moreover, the flexibility of touch technology can significantly contribute to cost reductions: it creates operational efficiencies by simplifying procedures and reduces the need for additional capital investment.

Compact and handy

Space is valuable, so you want to use it as efficiently as possible. Touchmonitors ensure that no space—on the desktop or elsewhere—is wasted, since the input device is completely integrated into the display. Flat LCD touchmonitors help save even more space. And there are no keyboard or mouse cords in front of the monitor to get tangled or damaged, or to gather dust.

Durable and easy to clean

A touchscreen is made of glass or a similar hard-coated surface. So it's easy to clean and therefore extremely well suited for the typical environments found in restaurants, hospitals, and the food and pharmaceutical industries. All of Elo's touchscreens can be used with gloves, which is great for applications where hygiene is particularly important or where temperature or workplace safety rules require the use of gloves. We offer touchscreen systems that are not affected by dirt, dust, grease, or liquid droplets. They are even rugged enough to stand up to harsh environments where keyboards and mice often get damaged.

When ease of use is required

Touchscreen-based systems virtually eliminate errors because users select from clearly defined menus. The information on each screen is limited in number and options, thus providing step-by-step, fail-safe sequences to guide the user through complex procedures. This greatly simplifies medical diagnostics applications—for example, where voluminous databases must be accessed quickly and easily. Touchscreens are also useful in simplifying process-control applications involving many buttons or switches, and for applications where system contents require protection from unauthorized entry.

Touch Is Used in Hundreds of Applications

point of sale

interactive payphones

industrial process control

transaction kiosks

loyalty systems

Touch input displays can be used for virtually any application. Common touchscreen applications include the following:

- Point-of-sale terminals
- Point-of-information kiosks
- In-store e-commerce
- Multimedia marketing
- ATMs
- Electronic catalogs
- Banking/financial transactions
- Industrial machine control
- Medical equipment
- Office automation
- Computer-based training
- Gaming, lottery, and amusement
- Ticket sales
- Interactive payphones
- In-vehicle and in-flight applications
- Handheld computers

ticket sales

multimedia marketing

car diagnostic systems

electronic voting

home control

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Ten Tips for Developing Effective Touch Applications

Ten simple pointers that can make the difference between success and failure for your touch-activated application.

1 **Run your application full screen.** Remove title bars and menu bars so your application can take full advantage of the entire display area.

2 **Use bright background colors (not black).** Bright backgrounds in your application will hide fingerprints and reduce glare. Dithering or other patterned backgrounds (for example, the "crumpled paper" look) help the eye focus on the screen image instead of reflections, even in areas where there are no icons or menu choices.

3 **Use a simple point-and-click interface with large buttons.** Dragging, double-clicks, scroll bars, drop-down menus, multiple windows, or other elements can confuse the typical user and detract from user-friendliness and efficiency.

4 **Turn the cursor off so your user will focus on the entire screen instead of the arrow.** A cursor on the screen makes the user think, "How do I get the arrow to do what I want?" Remove the cursor, and the user's thinking and actions become direct instead of indirect—thereby unlocking the true power of touchscreens.

5 **Always give your users feedback as soon as they touch the screen.** Immediate feedback is critical to reassure the user that a touch has registered. Responses can be visual, as 3-D button effects similar to those found on a standard Windows button. Or you can provide an audio response, such as a "click" or other sound output whenever a user touches the screen.

6 **Make your application fun and fast.** Users will walk away from a sluggish system. You can keep their attention with a quick response to touches. Speedy systems also reduce vandalism. Avoid graphics modes offering excessive colors or high resolution—these will only slow down your system.

7 **Make the application intuitive, limit choices, and guide the user as much as possible.** Test your application with users. If they pause in confusion—even for a moment—you've identified an area that needs improvement.

8 **Digitized speech can talk users through your application.** Because the human brain can simultaneously process a voice and absorb an image, there is something almost magical about a user interface that provides voice prompts and touch response. The better kiosk applications exploit this knowledge for maximum effect. For example: "Touch the first letter of the company you are looking for." Click. "Now touch OK." Click.

9 **Make your application part of an attractive package.** Animation and large fonts help attract users to kiosk applications. The actual design of the kiosk cabinet should also be attractive and sturdy.

10 **Keep the following in mind when designing a kiosk cabinet.** Are you using forced-air ventilation? Put your fan at the top, near the monitor's vents. To minimize airborne dust from footsteps, keep the intake away from the floor. Keep air from entering around the monitor's face. Point your speakers in the direction of your user's ears. Use an Elo Entuitive kiosk touchmonitor—otherwise, allow for variations in the physical dimensions of monitor models, as they change frequently. Finally, choose a kiosk finish that does not show fingerprints—avoid polished stainless steel, chrome, or glossy black paint.

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Why an Elo Entuitive Touchmonitor?

Buying an Elo Entuitive touchmonitor is the surest, fastest way to get your touchscreen application up and running and make sure it stays that way for a long time. Because standard desktop monitor models change frequently—and are seldom designed with touch in mind—it's difficult for typical providers of touchmonitors based on office desktop displays to ensure reliability under the heavy usage experienced by the most successful touch-based systems.

Elo's Entuitive line of touchmonitors gives you the advantage of over 30 years of experience in touchmonitor design. We continuously listen to our customers' demands for better touch solutions, and we've implemented these needs into our newest line of touchmonitors—which can truly be called "designed for touch." In the new Entuitive line, Elo has applied its extensive knowledge of touch technologies, CRTs, and LCDs to the design and manufacture of consistently high-quality, reliable touchmonitors with full agency approvals and Elo's renowned service and support.

Elo has it all.
Elo Entuitive touchmonitors allow you to source a complete touch hardware solution from one vendor rather than three (touchscreen kit, monitor, integration service). So Elo Entuitive touchmonitors save you both time and a potentially high investment in monitor integration (capital equipment, supplies, facilities, expertise, and personnel).

You get a touchmonitor designed for touch.
Not all touchmonitors are created alike. Elo sets monitor specifications that enable the production of high-quality, low-cost monitors optimized for touch. Elo can also provide custom modification, incorporating a variety of cabling, sealing, packaging, and other options, so your touchmonitor is perfectly suited to your application.

Off-the-shelf touchmonitors get you up and running quickly.
Elo and its distribution partners can offer you touchmonitors that are ready to use, right out of the box. Elo's Entuitive touchmonitors for kiosk and industrial applications have fixed outside dimensions. Elo will maintain the model design of its metal-chassis touchmonitors much longer than the average plastic-case monitor manufacturer, thus reducing the need to redesign your application around a monitor component change.

You avoid safety risks to yourself or your monitor.
Everyone knows to avoid electrical shock from high-voltage components inside the monitor, but did you know that it's possible to shorten the life of your monitor if the power tap is installed incorrectly? Or that if a touchscreen is poorly sealed to the monitor interface, it will allow dust to degrade the optics of your touchscreen? With an Elo Entuitive touchmonitor you get assurance of lasting quality and safety.

UNIVERSAL SERIAL BUS

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Why an Elo Entuitive Touchmonitor?

Elo provides ruggedized packaging.
To ensure that the touchmonitor makes it to you—and on to your customer—Elo takes special care in securing touch components inside the monitor and using packaging that withstands all industry-standard drop tests. Shipment of each box includes a force indicator that warns if excessive force and possible damage occurred during shipping.

You have all the information you need.
Elo Entuitive touchmonitors ship with an Elo TouchTools CD, which contains drivers for all popular operating systems, technical manuals, and diagnostic software. Drivers, technical information, and product specs are also available 24 hours a day on our Web site, www.elotouch.com.

Elo Entuitive touchmonitors come with agency approvals.
Elo's standard touchmonitors are recertified after the addition of touch components (FCC, CE, TÜV, UL, cUL) for ease in certifying your end system. In fact, Elo's standard CRT touchmonitors contain all best-practice recognized features, such as digital on-screen display (OSD) controls; power management (EPA/ENERGY STAR®, VESA/DPMS); and Plug and Play compatibility (VESA DDC1 and 2B compliant).

Technical support.
Elo's technical support and application engineering staff bring a wealth of experience to the development and deployment of touch-based systems. With resources throughout the United States, Europe, and Asia, Elo can provide technical support and application engineering assistance almost anywhere in the world—on site if necessary—including guidance in the advanced setup and configuration of Elo software drivers for special needs. Elo offers a variety of online resources to help customers and developers troubleshoot problems. These resources include "Web Tech," which provides step-by-step troubleshooting and online diagnostic tools; "TouchTools Software," offering a complete line of software drivers and development tools for all popular operating environments; and downloadable product manuals and literature.

Manufacturer's warranty.
Without the agreement of the monitor manufacturer, a monitor's warranty is voided as soon as the monitor is opened. When you purchase Elo touchmonitors, Elo guarantees full customer satisfaction. Every Elo touchmonitor, the world over, comes with Elo's quality service. Elo also offers out-of-warranty repair services for your convenience.

ISO 9001

TÜV Rheinland Gruppe — BAUART GEPRÜFT — TYPE APPROVED

c UL us

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Elo Custom Solutions

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Elo TouchSystems provides a broad line of LCD and CRT touchmonitors that meet today's increasing demand for a variety of form factors for touch input capability.

There are occasions when a customer requirement falls outside of our standard product range. Elo can meet those requirements with custom solutions.

Capabilities for Custom Solutions

Customer-specific products. Elo focuses on the custom needs of the OEM. Working from your specifications, we can quickly develop unique touchmonitors that integrate seamlessly into your system. Our staff of experts oversees all the details—from prototyping, through development, to production—to ensure the right touch display for your application.

Rapid in-house prototyping. With an in-house mechanical design and prototyping staff, Elo can rapidly design and build prototypes, "proof-of-concept" models, and even short-run production parts within days of beginning a project.

Touchscreen expertise. Elo's in-house electronic engineering staff has a broad-based knowledge of electronic design and systems and, most importantly, 30 years of touchscreen technology experience.

Compliance engineering staff. Elo's in-house compliance engineering staff is knowledgeable in all compliance issues. Elo has successfully acquired approvals from many major organizations (UL, FCC, CE, TÜV, TCO, VCCI, CB, AAS, DHHS) and for numerous applicable touchmonitor standards.

Unique production requests. Elo commonly paints monitors, applies static dissipative coatings, adds custom logos, and fulfills many other custom monitor assembly requests. Elo can build most any touchmonitor, fitting virtually all custom touchmonitor applications.

NEC–MITSUBISHI SELECT INTEGRATOR™

Elo is now an Authorized Integrator of touchscreen technology for NEC-Mitsubishi Electronics Display.

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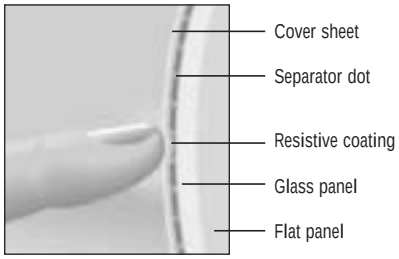
Four-Wire Resistive Technology

Four-wire resistive technology

Contoured to fit snugly into the shape of the display, Elo's four-wire resistive technology consists of a glass panel uniformly coated with electrically conductive and resistive layers. A polyester cover sheet is tightly suspended over the top of the glass and is separated from it by small, transparent insulating (separator) dots. The outer side of the cover sheet is a hard, durable coating; the inner side has a conductive coating. During operation, an electrical current moves through the touchscreen. Activated by even a light touch, the conductive coating makes contact with the coating on the glass and a touch point is registered.

Four-wire resistive technology



The controller circuit applies a voltage gradient across the resistive surface of the glass. The voltages at the point of contact are the analog representation of the position touched. The controller digitizes these voltages and transmits them to the computer for processing.

Four-wire benefits

- Stable, drift-free operation
- Consistently accurate, fast touch response
- Finger, gloved-hand, pen, and stylus activation
- Durable surface that resists contaminants and chemicals
- Antiglare surface treatment
- Available in 6.0", 8.4", and 10.4" models
- Gasket-sealable construction
- UL/TUV certification
- Compact COACh IIs chip controller with power-down mode
- Compatible with Elo's SmartSet protocol and standard drivers

Four-wire economy for public-activated applications

- Point-of-sale terminals
- Banking and financial ATMs
- Industrial process control
- Office automation
- Transportation
- Gaming and amusement

Four-Wire Performance

Light transmission	78%
Surface finish	ITO, and antiglare
Surface hardness	3H per ASTM D3363
Input methods	Finger, gloved hand, pen, or stylus
Operating temperature	0°C to 50°C
Storage temperature	–20°C to 70°C
Linearity	1.5% or less
Durability	1 million touches
Warranty	1 year

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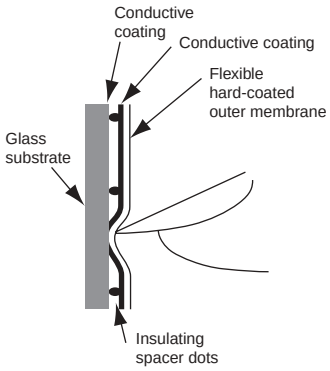
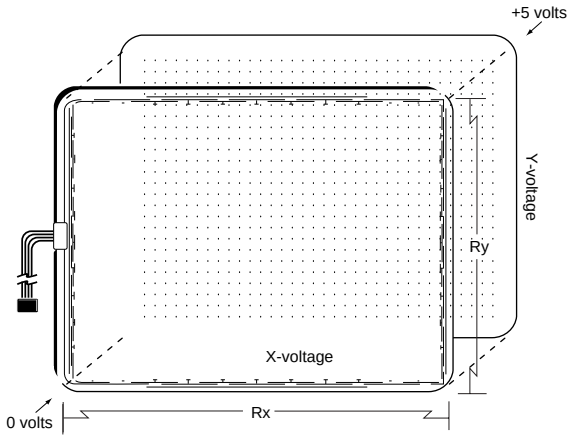
AccuTouch: Five-Wire Resistive Technology

AccuTouch technology

Formed to fit the shape of a display, the AccuTouch glass panel has a coating of uniform resistivity. A polyester cover sheet is tightly suspended over the top of the glass, separated from it by small, transparent insulating dots. The cover sheet has a hard, durable coating on the outer side and a conductive coating on the inner side. At a light touch, the conductive coating makes electrical contact with the coating on the glass.



The AccuTouch controller circuit applies a voltage gradient across the resistive surface of the glass. The voltages at the point of contact are the analog representation of the position touched. The controller digitizes these voltages and transmits them to the computer for processing.



AccuTouch benefits

- Five-wire resistive technology
- Stable, drift-free operation—for touch response that's always accurate
- Highest touchpoint density in the industry
- Fast touch response
- Finger, gloved-hand, and stylus activation
- Durable surface that stands up to harsh contaminants and chemicals
- Gasket-sealable construction
- Flat and spherical touchscreen options for design flexibility
- Sealability—certified to NEMA standards; designed to meet industrial standards

AccuTouch products—for clerk- or employee-activated applications

- Point-of-sale terminals
- Industrial process control
- Handheld computers
- Medical equipment
- Internet phone
- Office automation
- Transportation

AccuTouch Performance

Accuracy	± 2.03 mm
Response time	<10 ms
Resolution	4096 x 4096 touchpoints
Light transmission	Up to 80%
Operating temperature	–10°C to 50°C
Storage temperature	–40°C to 71°C
Sealability	UL/cUL recognized to NEMA 4/4X/12; designed to meet IP56
Expected life	Tested to over 35 million touches on one spot without failure
Chemical resistance	Tested with acetone, methylene, isopropyl-alcohol, ammonia-based glass cleaner, and others

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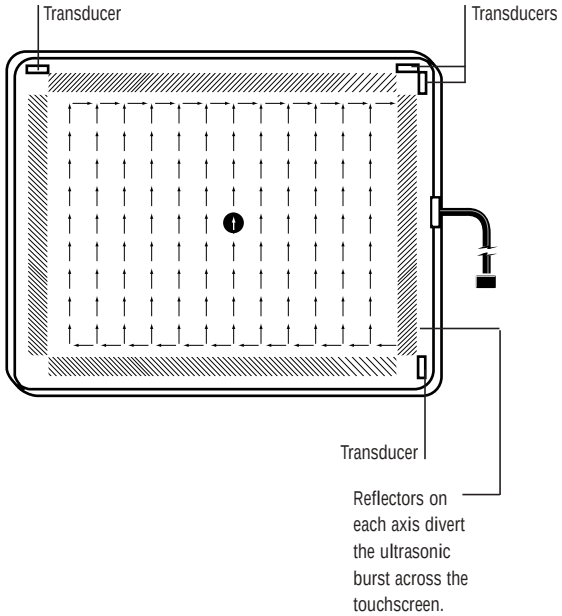
IntelliTouch: Surface-Wave Technology

IntelliTouch technology

The IntelliTouch touchscreen is a glass overlay with transmitting and receiving piezoelectric transducers for both the X and Y axes. The touchscreen controller sends a five-megahertz electrical signal to the transmitting transducer, which converts the signal into ultrasonic waves within the glass. These waves are directed across the front surface of the touchscreen by an array of reflectors. Reflectors on the opposite side gather and direct the waves to the receiving transducer, which reconverts them into an electrical signal—a digital map of the touchscreen surface.

When you touch the screen, you absorb a portion of the wave traveling across it. The received signal is then compared to the stored digital map, the change recognized, and a coordinate calculated. This process happens independently for both the X and Y axes. By measuring the amount of the signal that is absorbed, a Z axis is also determined. The digitized coordinates are transmitted to the computer for processing.



IntelliTouch benefits

- Surface-wave technology
- Pure-glass touchscreen for superior image clarity, resolution, and light transmission
- Durable, scratch-resistant glass surface—continues to work if scratched
- Stable, drift-free operation—for touch response that's always accurate
- Smart touch response—no false touches
- Finger, gloved-hand, and soft-stylus activation
- Fast touch response
- Flat, spherical, and cylindrical touchscreen options for design flexibility
- Antiglare-glass option
- Sealability—designed to meet national and industrial standards

IntelliTouch products—for self-service applications

- Point-of-information kiosks
- Electronic catalogs
- Gaming, lottery, and amusement
- Multimedia marketing
- Banking/financial transactions
- Ticket sales
- Public pay phones
- Industrial control rooms
- Computer-based training
- Medical images management

IntelliTouch Performance

Accuracy	± 2.03 mm
Response time	<10 ms
Resolution	4096 x 4096 touchpoints
Light transmission	Up to 92.5% (glass)
Operating temperature	–20°C to 50°C
Storage temperature	–40°C to 71°C
Sealability	NEMA 3/3R/5/12/12K/13, IP64
Surface durability	Glass (7 on the Mohs scale)

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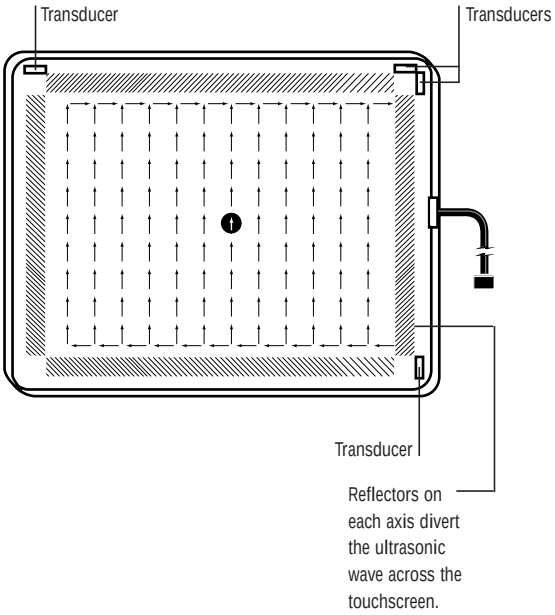
SecureTouch: Surface-Wave Technology

SecureTouch technology

SecureTouch products are made of tough, break-resistant glass that inhibits vandalism while providing a fast response to a light touch. SecureTouch touchscreens incorporate the solid-glass, coating-free construction of proven surface-wave technology, so they withstand scratches, abrasions, and impacts that would disable other touchscreens.

The SecureTouch system has three main components: a clear solid-glass screen formed to match the shape of a display, an electronic controller, and a software driver.

The controller uses ultrasonic waves on the glass to develop a digital map of the touchscreen surface. A touch on the screen absorbs a portion of the wave traveling across it. The received signal is then compared to the stored digital map, the change recognized, and a coordinate calculated. The digitized coordinates are transmitted to the computer for processing.



SecureTouch benefits

- Fully tempered glass for 15.1" and smaller sizes
- No coatings or overlays to wear, scratch, or tear
- High impact resistance
- Safe break pattern (tempered glass only)
- Sensor designs that match industry-leading displays
- Thicknesses of 6 mm and 12 mm
- Antiglare-glass option (6 mm thickness only)
- Sealability—UL/cUL recognized to NEMA 4/4x/12; designed to meet IP66
- Privacy filter option for applications involving sensitive information (such as ATM transactions)

SecureTouch applications

- Kiosks
- Multimedia demos and marketing
- Ticket sales, vending, and gift registries
- Gaming, lottery, and amusement
- Banking/financial transactions
- Industrial control rooms
- Interactive pay phones

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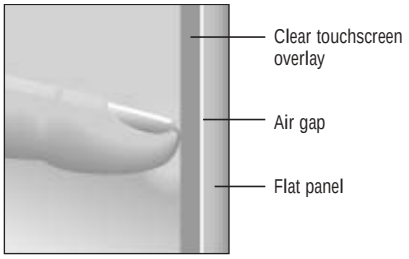
iTouch: "Touch-on-Tube" Technology

iTouch technology

Using surface-wave technology as a foundation, Elo has achieved a breakthrough in touch technology—iTouch. In Elo's new iTouch touch-on-tube technology, surface waves are directed onto the cathode ray tube (CRT) surface for touch sensing, *eliminating any glass overlay on the CRT and delivering the highest-quality image possible*. iTouch also enhances durability—a critical feature for the public-access environment—because the CRT faceplate is several times stronger than a touchscreen overlay.

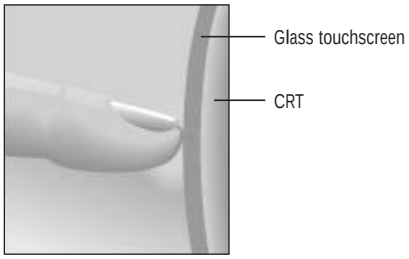
The new iTouch technology enhances brightness and clarity, without jeopardizing the stable, drift-free performance and proven reliability of surface-wave technology.

IntelliTouch Touchscreen Overlay



You touch a glass touchscreen overlay.

iTouch Touch-on-Tube



You touch directly on the CRT surface.

iTouch benefits

- Touch directly on tube—no touchscreen overlay
- Preserves 100 percent of CRT brightness, clarity, antireflection, and color properties
- More durable and safer than even bonded touchscreen overlays
- Same fast, accurate, stable performance as surface-wave

iTouch products—for self-service applications

- Point-of-information kiosks
- Point-of-purchase promotion
- Electronic catalogs
- In-store e-commerce
- Gaming, lottery, and amusement
- Multimedia marketing
- Banking/financial transactions
- Ticket sales
- Industrial control rooms
- Computer-based training
- Education

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CarrollTouch: Infrared Technology

CarrollTouch infrared technology

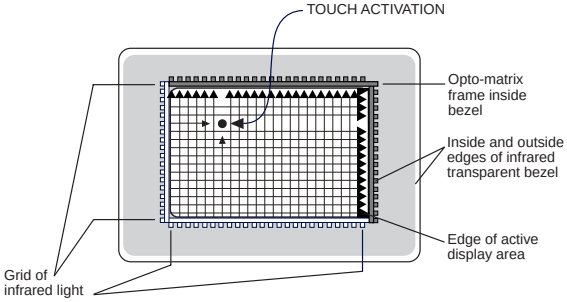
Scanning infrared (IR) technology relies on the interruption of an IR light grid in front of the display screen. The touch frame contains rows of IR-light-emitting diodes (LEDs) and photo transistors, which create a grid of invisible infrared light. The IR controller sequentially pulses the LEDs to create the grid of IR light beams. When a stylus, such as a finger, enters the grid, it obstructs the beams. One or more photo transistors detect the absence of light and transmit a signal that identifies the X and Y coordinates.

Perfect operation in direct sunlight

With CarrollTouch touchscreens, you can have the benefits of infrared technology in direct sunlight. CarrollTouch flat-panel touchscreens are available with unique high-ambient-light circuitry that operates flawlessly even in 10,000 foot-candles of direct light.

Completely sealable

CarrollTouch infrared touchscreens offer a built-in filter to protect the surface of the display and to seal the unit up to NEMA 4 or IP56. The touchscreens can be operated with any kind of stylus—including gloved fingers—which is one reason CarrollTouch is the preferred choice in hospital operating rooms around the world. Consistent quality, even in the severest environments, makes CarrollTouch unrivaled for heavy industrial, medical, commercial food preparation and service, and other clean-room applications.


TOUCH ACTIVATION
Opto-matrix frame inside bezel
Inside and outside edges of infrared transparent bezel
Edge of active display area
Grid of infrared light

Benefits of CarrollTouch infrared

- Withstands severe environments
- Adjusts to changing light conditions, including direct sunlight
- Stable, drift-free calibration performance
- Rugged dependability
- Parallax-free performance for LCD displays
- Sealability—designed to meet national and industrial standards
- Perfect solution for large plasma screens with clip-on frame, requiring no additional agency approvals and no need to add fragile glass that adds weight and can break

CarrollTouch applications

- Indoor/outdoor kiosks
- ATMs
- Ticketing machines
- Medical instrumentation
- Process-control systems
- Hospital operating rooms
- Commercial transportation
- Commercial food preparation and service

CarrollTouch Performance

Typical accuracy	1.2 mm
Response time	23 ms
Resolution	4096 x 4096 touchpoints
Light transmission	90 to 100%
Operating temperature	–20°C to 70°C
Storage temperature	–40°C to 85°C
Sealability	Designed to meet NEMA 3/3R/4/5/12/12K/13, IP56

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Guide to Choosing an Elo Touch Technology

Your application requirements	Elo technologies
When economy is key	**Four-wire resistive technology**
Clerk- or employee-activated applications - Point-of-sale terminals - Industrial machine control - Handheld computers - Medical equipment - Office automation	**AccuTouch five-wire resistive technology**
Public-access applications - Point-of-information kiosks - Electronic catalog - Gaming, lottery, and amusement - Multimedia marketing - Banking/financial transactions - Ticket sales/transportation - Multimedia pay phones - Industrial control rooms	**IntelliTouch surface wave technology**
When 100% image quality is a must	**iTouch touch-on-tube surface-wave technology**
In a vandal-risky environment	**SecureTouch vandal-resistant surface-wave technology**
Rugged environments and other special applications - GPS systems in cars, trucks, and other vehicles - Train operating systems - Seatback displays in trains and airplanes - Ticket vending machines - Outdoor applications: ATMs, info kiosks, gas station pumps, multimedia pay phones, and so on - Large (>40") multimedia displays	**CarrollTouch infrared technology**

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Specific Elo features	Form factor options
- Durability and stability at a lower cost point	- Desktop LCD and CRT touchmonitors for most countertop applications - Panel mount, rear mount, and chassis LCD and CRT touchmonitors for easy display and touch solutions - Touchscreen, controller, and chipset components for OEMs
- Stable, drift-free operation—for touch response that's always accurate - Highest touchpoint density - Fast touch response - Finger, gloved-hand, pen, swipe-card, or any other stylus activation - Durability; tested to over 35 million touches on a single point - Sealability to NEMA 4/4X/12, IP56 - Flat and curved touchscreen options for design flexibility - Operation that's not activated by dust or dirt	- Desktop LCD and CRT touchmonitors for most countertop applications - Panel mount, rear mount, and chassis LCD and CRT touchmonitors for easy display and touch solutions - Touchscreen, controller, and chipset components for OEMs
- Pure-glass touchscreen for superior image clarity, brightness, and light transmission - Durable, scratch-resistant glass surface - Operation that's unaffected by static water droplets and scratches on the screen - Stable, drift-free operation—for touch response that's always accurate, even in electrically noisy environments - Touch response faster than human perception - Smart touch response—no false touches - Finger, gloved-hand, or any other stylus activation - Flat and curved touchscreen options for design flexibility - Antiglare option	- Desktop LCD touchmonitors for most countertop applications - Panel mount, rear mount, and chassis LCD and CRT touchmonitors for built-in installations - Touchscreen and controller components for OEMs and integrators
- No overlay—for perfect optical performance without parallax - Toughness that exceeds that of bonded overlays	- Desktop and rear mount CRT touchmonitors
- 6-mm and 12-mm strengthened glass overlays that exceed UL-1950 ball drop specifications	- Rear mount and chassis LCD touchmonitors for built-in installations - Flat touchscreens and controllers for OEMs
- Shock resistance - Finger, gloved-hand, or any other stylus activation (>6 mm) - Stable, drift-free operation—for touch response that's always accurate - Flexible design that can incorporate almost any material for display protection - Wide range of available filters - Sealability to NEMA 3/3R/4/5/12/12K/13, IP56 - Operation unaffected by direct sunlight - Operation unaffected by splashed liquids - Optional lightweight frames for large plasma displays	- Low Profile Extended Resolution IR sensor with acrylic filter, glass filter, or no filter - Matching controller card or chipset solution available

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LCD or CRT

Which Display Type Is Right for Your Application?

Once you've decided to enhance your application with touch and have selected a touch technology—resistive, surface-wave, or infrared—you should compare characteristics of liquid crystal displays (LCDs) and cathode ray tubes (CRTs) to determine which display type best suits your application and environment.

Comparing display types based on the following criteria can help you make the best choice for your application.

Display Life

All displays slowly decline in performance from their new condition by gradually losing brightness. This decline is measured as the period of time required for the display to drop to 50 percent of its original brightness. Displays in touch applications often operate around the clock because many are in public-access settings.

- LCDs—The average expected life of an LCD backlight is 25,000 to 30,000 hours. This represents three to four years of use for a display operating 24 hours a day, seven days a week. The backlight of an LCD can often be replaced economically, prolonging the life of the display.
- CRTs—The average expected life of a CRT is 12,000 to 15,000 hours. This represents one and a half to two years of use for a display operating 24 hours a day, seven days a week. It is rarely economical to replace the tube within a CRT.

Footprint, Appearance, and Weight

With its flat screen and slim footprint, an LCD takes up less space than a CRT. In fact, a 15" LCD monitor fits into about 40 percent of the space occupied by a 17" CRT, yet has approximately the same viewable area. In addition, LCDs can be mounted on a wall to save desktop space and can fit into smaller available spaces inside industrial equipment. Saving space can translate into increased revenue—you can use the extra space for more merchandise in a retail setting, more employees in an office, or more vital equipment in a workshop or factory.

The futuristic look of LCDs increases their appeal for customers who want to associate their company or application with leading-edge technology.

In addition, LCDs weigh much less than comparable CRTs, which can be a consideration for displays mounted on mechanical arms in settings such as hospitals, or when shipping kiosks that use LCDs.

Advantages of the CRT

- Low purchase price
- Right choice for ultra-high-resolution applications
- Greater viewing angle allows multiple viewers from different angles
- Better for display of full-motion video

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LCD or CRT

Which Display Type Is Right for Your Application?

Advantages of the LCD

- Lower lifetime cost
- Smaller footprint for space-saving applications
- Right choice for high-ambient-light environments
- Delivers a flicker-free image
- Consumes up to one-third less power than a same-sized CRT

Image Quality

- LCDs are available in brightness levels that far exceed those of typical CRTs, which makes them the right choice for environments with high ambient light levels and for applications, such as public-access kiosks, where a brighter display attracts attention and invites usage. LCDs also deliver a flicker-free image.
- CRTs are the right choice for ultra-high-resolution applications, such as medical imaging. In addition, because the viewing angle of a CRT is greater than that of an LCD, CRTs are preferable for an application where multiple viewers will be looking at a display from different angles. An example is a public access kiosk used by children and adults or by a group of people at one time. CRTs are also ideal for displaying full-motion video.

Power Consumption and Heat Generation

LCDs consume up to one-third less power than the same-sized CRT monitors and thus generate less heat than CRTs. This not only saves money, it makes them the right choice for industrial equipment and environments where many displays in a confined space would raise heat levels appreciably and increase HVAC expenses.

Cost and Total Cost of Ownership

A 15" LCD touchmonitor has about the same viewing area as a 17" CRT touchmonitor, but costs approximately 50 to 100 percent more. However, in comparing the total cost of ownership of an LCD versus a CRT, it's important to also take into account the LCD's longer life span, space-saving ability, and lower power consumption. The cumulative effect of these variables may make the LCD a more cost-effective choice despite its higher purchase price.

Touch Solutions from Elo

LCD and CRT touchmonitors from Elo are simple, stable, durable solutions for the widest range of touch-input applications. Elo offers several touch technologies: AccuTouch five-wire resistive, IntelliTouch surface-wave, SecureTouch surface-wave, iTouch touch-on-tube, and CarrollTouch infrared. Whichever technology you select, Elo has the right touch solution for your application.

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Countertop or Full Kiosk Enclosure

Which Kiosk Type Is Right for Your Application?

In the interactive public-access environment, Elo is the touchmonitor manufacturer of choice. But should that choice of kiosk be a freestanding enclosure or a countertop interactive display? Elo offers solutions for both.

Elo's line of touchmonitors includes cathode ray tube (CRT) or liquid crystal display (LCD) displays in a range of sizes and enclosures for countertop or enclosure use. (For help choosing between LCDs and CRTs, see pages 18 and 19.)

Countertop Interactive Displays: The New Flexible Kiosk

Countertop interactive displays are perfect for a wide range of applications in which cost, mobility, and flexibility are top criteria. Some typical applications include the following:

- Countertop interactive catalog for e-commerce
- Sales tool for staff
- Video/audio preview of CDs and videos
- Self-service station
- Brand-driven multimedia promotions
- Frequent shopper/affinity programs
- Surveys and market research

Mobility, Security, and Space

Freestanding enclosures are usually fixed and occupy a dedicated amount of floor space. They lack the mobility of the more compact countertop interactive displays, which can easily be moved around to meet changes in floor-space layout.

A freestanding enclosure is ideal for unsupervised public use, providing all the benefits of the application while ensuring equipment security. A freestanding kiosk can be left unattended around the clock, whereas countertop displays are limited to areas that are at least semi-supervised.

Countertop displays can fit into 25 to 50 percent of the footprint of a freestanding enclosure. They come packaged in different form factors designed to be placed on existing retail display fixtures—shelving, countertops, a customer service desk, aisle end cap displays—or incorporated into other merchandising displays to expand interactive opportunities.

Advantages of countertop interactive displays

Elo's 1525L 15" LCD Entuitive touchmonitors make ideal interactive countertop displays:

- Side controls can be locked out in public
- Controls are on the side
- Base can be bolted to countertop from underneath and are wall mountable
- The display is stable when touched
- Solid hinge on monitor tilt ensures protection in high-traffic environments
- Cable management design conceals cabling
- Built-in speakers save space

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Countertop or Full Kiosk Enclosure

Which Kiosk Type Is Right for Your Application?

Elo offers both full enclosure and countertop kiosk touchmonitors

Branding and Cost

Both the freestanding enclosure and the countertop interactive display attract customers and help increase sales. The fixed nature and size of a freestanding enclosure provide the opportunity to use kiosk graphics and design to incorporate and customize product/company branding. Depending upon the application, the cost of a countertop display can be less than that of its sturdier, more secure, and more resilient counterpart.

Advantages of Freestanding Enclosures

- Unattended, secure operation 24 hours a day, seven days a week
- Durability and resistance to abuse
- Opportunity to reinforce branding through kiosk design and graphics
- Ability to accept peripherals such as bar-code scanner, credit-card reader, or telephone

Elo offers touchmonitors that are designed specifically for kiosk enclosures. Elo has an outstanding group of Kiosk Partners who provide freestanding enclosures (see page 87).

Advantages of Countertop Interactive Displays

- Mobility and versatility
- Footprint one-quarter to one-half that of a freestanding enclosure, freeing valuable floor space
- Cost less than that of a freestanding enclosure solution
- Capacity for incorporation into existing product displays or retail fixtures

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Industrial Solutions

Everything You're Looking For in an Industrial Touchmonitor

Elo Entuitive Touchmonitors for Industrial Applications

Entuitive Touchmonitors for Built-in Installation

Size	Panel Mount LCD	Page	Rear Mount CRT	Page	LCD	Page
12"	1266L	54			1246L	42
15"	1566L	55	1545C	62		
15"					1545L	44
15"	1567L	56			1547L	46
15"	1549L (rear mount)	48				
17"	1767L	57	1745C	64	1747L	50
18"	1847L (rear mount)	52				
19"			1945C	66		

Entuitive Touchmonitors—Desktop

Size	CRT Model	Page	LCD Model	Page
12"			1224L	31
12"			1225L	32
15"	1525C	58	1524L	34
15"	1526C	59	1525L/1527L	35
17"	1725C/1726C	60	1725L/1727L	39
18"			1825L/1827L	41
21"	2125C	61		

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Industrial Solutions

Everything You're Looking For in an Industrial Touchmonitor

Advantages of Elo Entuitive industrial touchmonitors

- Superior reliability
- Rapid delivery
- Dedicated technical support
- Competitive price
- Choice of touch technologies
- Choice of configurations
- Stable, drift-free operation
- Scratch and abrasion resistance
- Impact resistance
- Sealability
- Agency certification—UL, TÜV, FCC, CE

The use of touchmonitors in industrial environments continues to grow because they offer the simplest, most direct way for employees to interact with computers. Elo Entuitive touchmonitors, with their many advantages, are the ideal solution for industrial applications.

- **Superior reliability**—Already well known as a vendor of highly reliable touchscreens, Elo now offers equally reliable products for the industrial market.
- **Rapid delivery**—Many products are available from stock, ensuring they can be shipped and put into service quickly.
- **Dedicated technical support**—In addition to giving you the benefit of our expertise as a touchscreen manufacturer, we can also help you solve problems with other aspects of touchmonitor technology, including installation and support for applications and software drivers.
- **Competitive price**—Elo Entuitive touchmonitors offer the best price/performance ratio. They're rugged enough for the industrial environment, yet not burdened with unnecessarily heavy-duty design features that add cost.
- **Largest selection of touch technologies**—Whatever your industrial application or environment, we offer the touch technology to meet your requirements. Choices include AccuTouch five-wire resistive, IntelliTouch surface wave, SecureTouch surface-wave, iTouch touch-on-tube, and CarrollTouch infrared.
- **Wide selection of configurations**—We offer prebuilt panel mount, chassis, rear mount, and desktop configurations to save you the time you might spend designing and engineering a custom solution.
- **Stable, drift-free operation** with all Elo touch technologies.
- **Scratch- and abrasion-resistant screens**—Our IntelliTouch, SecureTouch, iTouch, and CarrollTouch touchscreens are highly scratch-resistant and are not impaired even if scratched with a sharp object.
- **Impact-resistant screen option**—Featuring fully tempered glass for 15.1" and smaller sizes and heat-strengthened glass for larger sizes, Elo's SecureTouch touchscreens can withstand heavy abuse or accidents that may occur in an industrial environment.

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Medical/Healthcare Solutions

Making the Most of Medical and Healthcare Touchmonitors

Elo Entuitive touchmonitors for medical/healthcare applications

Entuitive Touchmonitors: Built-in Applications

Size	Panel Mount LCD	Page	Rear Mount CRT	Page	LCD	Page
12"	1266L	54			1246L	42
15"					1545L	44
15"	1566L	55	1545C	62		
15"	1567L	56			1547L	46
17"	1767L	57	1745C	64	1747L	50
18"	1847L (rear mount)	52				
19"			1945C	66		

Entuitive Touchmonitors: Self-Standing

Size	Desktop CRT	Page	Desktop LCD	Page
12"			1225L	32
15"	1525C/1526C	58	1525L/1527L	35
15"		59	1526L*	37
17"	1725C/1726C	60	1725L/1727L	39
18"			1825L/1827L	41
21"	2125C	61		

*Medical-grade touchmonitor

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Medical/Healthcare Solutions

Making the Most of Medical and Healthcare Touchmonitors

Advantages of Elo Entuitive medical/healthcare touchmonitors

- Stable, drift-free operation—no need for recalibration
- Complete sealability
- Drip-proof medical-grade models
- Activation by rubber gloves, fingernails, and pens
- Simplification of complex tasks
- Wide range of sizes, displays, and form factors
- Superior reliability
- Rapid delivery
- Dedicated technical support
- Choice of touch technologies
- Scratch and abrasion resistance
- Impact resistance

The practical application of Elo Entuitive touchmonitors within the medical and healthcare environment is wide and varied. Used with medical equipment, Entuitive touchmonitors act as an interface, improving the efficiency and accuracy of analytical instruments, sophisticated x-ray and ultrasound machines, and cardiac management machines. Entuitive touchmonitors do not require recalibration, even when the equipment is moved frequently. The new drip-proof Entuitive 15" LCD flat-panel medical-grade touchmonitor actually sheds water and is safe from liquid drops and spills. It can be sterilized with hospital-grade disinfectants, which makes it the ideal interface in patient-care areas—such as the operating room—where contamination may occur.

In the healthcare arena, Elo Entuitive touchmonitors help medical professionals in the use of electronic patient records, information systems, nursing station control, and hospital bed management systems. They are also the ideal tools for patient education; patients can use the intuitive touch interface to learn about upcoming surgical procedures or future treatments for their medical conditions in a self-paced, nonthreatening way.

Medical kiosks provide information and interaction in hospitals and in doctors' and dentists' offices. Elo Entuitive touchmonitors are an integral part of the rapid growth of medical kiosk applications, because the touch interface is universal and can be used by anyone regardless of language, education, or socioeconomic or cultural background.

Elo Entuitive touchmonitors for medical and healthcare applications offer the largest selection of touch technologies.

- Medical Equipment: AccuTouch five-wire resistive is the most widely used touchscreen technology for medical equipment applications because it handles liquid splashing, aggressive cleaning, and other harsh conditions better than any other technology—and at a competitive price. CarrollTouch scanning infrared technology is well suited for those applications—such as x-ray equipment—that demand superior optical performance as well as a seal.
- Healthcare: Surface wave is the most widely used touchscreen technology for healthcare applications. If the application is CRT-based, iTouch touch-on-tube (no-overlay) technology provides superior optical and image quality along with resistance to scratches, breakage, and vandalism. For LCD-based applications, IntelliTouch overlay is widely used, and the SecureTouch touchscreen provides an additional measure of resistance to breakage and vandalism because of its tempered or heat-strengthened glass construction.

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Kiosk Solutions

The Right Choice for Your Kiosk

Elo Entuitive touchmonitors for kiosks are the industry's first sealed touchmonitors designed specifically for kiosk applications.

Touchmonitors are used in the vast majority of kiosks to make interaction intuitive and easy, and Elo Entuitive touchmonitors are the right choice for your kiosk because they are sealed, versatile, durable, and designed specifically for kiosk applications.

Reduces Your Overall Cost

- **Industry-leading engineering for robust operation.** Elo's well-ventilated metal chassis keeps the CRT cooler, significantly extending its operational life. The flat monitor bezel provides a clean interface with the kiosk enclosure and is sealed to the touchscreen to protect the monitor electronics from splashed liquids, dirt, and dust.

  Elo Entuitive LCD touchmonitors for kiosks consume less power and generate less heat than CRTs, making them the right choice for environments where heat generation is a concern.

- **Easy integration into your kiosk design.** With a custom-designed chassis and sealable bezel surface, versatile Elo Entuitive touchmonitors for kiosks—available as CRTs or flat-panel LCDs—integrate easily into your kiosk design. The touchmonitor can be mounted from its front or base (mounting hardware is provided), eliminating the need to spec and purchase brackets and supports.
- **Fixed outside dimensions.** Elo maintains the model design of its kiosk touchmonitors much longer than the average plastic-case monitor manufacturer, reducing the chance you will need to redesign your kiosk around a monitor component change.

Delivers Rugged Performance in Tough Environments

- **Intelligent scratch tolerance.** Elo's surface-wave touch technology continues to operate even with scratches. It actually "reprograms" around surface contamination like gum, grease, and dirt. This capability is especially important in public-access kiosks where wear and tear and vandalism can occur.
- **High light transmission for bright, clear graphics.** Elo's IntelliTouch or SecureTouch surface-wave, pure-glass touchscreens are the highest-clarity touchscreens in the industry. Elo Entuitive LCD touchmonitors with IntelliTouch are even brighter than CRT touchmonitors, which makes them an attractive choice for kiosk environments with high ambient light levels and for applications where a brighter display attracts attention and invites usage. Elo's breakthrough touch-on-tube technology, iTouch, preserves 100 percent of the original CRT brightness and image quality because no overlay is required.
- **Long touchscreen performance life.** Elo's surface-wave technology has been operationally tested to 50 million touches in one location without failure.
- **Break-resistant screens.** SecureTouch touchscreens deliver all the benefits of IntelliTouch screens, plus high impact resistance. SecureTouch products are made of tough, break-resistant glass that inhibits vandalism while providing a fast response to a light touch.

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Kiosk Solutions

The Right Choice for Your Kiosk

Low Maintenance, High Quality

- **Reliable, drift-free operation.** This means no recalibration, which will help keep your maintenance costs down. On-screen display capability allows users to make image adjustments without having to open the monitor.
- **Easy worldwide agency approval.** Elo Entuitive touchmonitors for kiosks are UL recognized, and FCC, CE, and TÜV-Bauart compliant, making it easier for you to obtain worldwide agency approval for your kiosk.
- **Extensive warranties.** Elo stands behind the reliability, quality, and ruggedness of its kiosks by offering a full manufacturer's warranty on all our touchmonitors.

More Solutions from Elo

- **Signature-capture products.** Scribex signature pads or special signature kiosk monitors allow you to capture a signature as part of your kiosk application.
- **Kiosk Partner program.** Full-service kiosk providers give you a complete kiosk system (see page 87).
- **TouchReady software developer program.** The TouchReady program includes browser overlay solutions and names of multimedia software developers for PC and Macintosh platforms.
- **Kiosk white papers and "Ten Tips for Developing Effective Touch Applications" (see page 61).** These materials and more are available on our Web site (www.elotouch.com).

Every Elo kiosk touchmonitor, the world over, comes with Elo's quality service and support from Elo's dedicated technical staff.

Elo Entuitive Touchmonitors for Kiosk Applications

Size	CRT Kiosk	Page	LCD Kiosk	Page	CRT Desktop	Page	LCD Desktop	Page
12"			1246L	42				
15"	1545C	62	1545L	44	1525C	58	1524L	34
15"	1587C	68	1547L	46	1526C	59	1525L/1527L	35
15"			1549L	48				
15"			1567L	56				
17"	1745C	64	1747L	50	1725C/1726C	60	1725L/1727L	39
17"	1787C	70	1767L	57				
18"			1847	52			1825L/1827L	41
19"	1945C	66						
19"	1987C	74						
21"					2125C	61		

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Touchmonitors

Entertainment, Amusement, and Gaming Solutions

You Can Win with Our Touchmonitors

Elo's touchmonitors are used throughout the entertainment, amusement, and gaming markets. They can be found in legal gaming casinos, interactive coin-operated amusement games, and frequent-player kiosks. Elo has become the company of choice for these markets because we offer a broad range of products—including both touch and non-touch monitors—and provide a single-source supply point for our customers, who have come to rely on Elo's expertise and experience as a monitor manufacturer.

Touch: The Natural Interface
Touch is the most natural interface between player and machine. The simplicity of a touch interface is less intimidating and more inviting than a separate input device; it allows players to concentrate on the activity presented on the screen without having to coordinate the hand-eye movements of an input device. Touch also enables a single user to play multiple games on one machine and gives software developers more freedom to develop creative games with unique payoffs and bonuses.

The Game Goes On
Elo's touchscreens are sensitive enough to respond to a very light touch from a finger, soft stylus, or gloved hand, yet sturdy enough to be unfazed by dirt, scratches, or cigarette ash, and they can be sealed against liquid spills—so the game goes on, uninterrupted.

Extended Family
Elo's family of open-frame CRT and LCD gaming monitors now encompasses 14 models, ranging from 12.1" through 19". It includes 17" and 19" true flat CRT monitors, and 15", 17", and 19" spherical CRT monitors. The LCD family includes 15", 17", and 18" rear mount monitors with wide viewing angles.

Reliability
You expect your desktop monitor never to fail—and the same should be true of your gaming monitor. Elo's open-frame gaming monitors incorporate proven basic circuits from desktop monitors, made more rugged specifically for the gaming and amusement industry. All of Elo's gaming monitors have worldwide agency approvals.

Advantages of Elo's gaming Monitors

- Designed and developed for legal gaming casinos, interactive coin-operated amusement games, and frequent player kiosks
- Open-frame reliability and consistency
- Stable, drift-free operation
- Scratch and abrasion resistant
- Integrated minibezel and watertight seal
- Over 10 models, from 12.1" through 19"
- Worldwide agency approvals
- Single-source supplier

Open-Frame Consistency
Our CRT gaming monitors have been developed with common features and electronics across all sizes. They are designed with a small footprint so that they can fit into machine makers' existing cabinets. The main electronics board measures a mere 20 x 25 cm, but is packed with features such as digital computer-grade video quality; built-in power, deflection and video test; multilingual remote OSD; and universal auto-switching power supply.

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Entertainment, Amusement, and Gaming Solutions

You Can Win with Our Touchmonitors

Highlights of Elo's CRT gaming monitors

- Choice of iTouch touch technology for truer, brighter colors and graphics
- Common design, field-replaceable electronics
- 17" and 19" true flat gaming monitors
- 15", 17", and 19" FST gaming monitors

Highlights of Elo's LCD gaming monitors

- Choice of IntelliTouch touch technology
- 15", 17", and 18" rear mount gaming monitors with wide viewing angles

Integrated Minibezel and Watertight Seal

All of Elo's gaming monitors feature our unique, field-replaceable, integrated minibezel. The minibezel forms a watertight faceplate seal to keep spilled drinks away from the electronics and stays in place even when the game cover is open. The seal is about 0.5 mm thick—thinner than a coin.

iTouch Touch-on-Tube Technology

Interactive games and gaming displays must be bright, colorful, attractive, and consistently reliable. Elo's iTouch, which is an option for all CRT gaming monitors, eliminates the traditional glass touchscreen overlay and places the touch sensors directly on the CRT faceplate itself. This provides significantly enhanced on-screen image, graphics, color quality, and clarity—as much as 20 percent greater brightness and 80 percent less reflection than monitors equipped with an overlay.

Elo Entuitive Touchmonitors for Point-of-Sale Applications

Size	Open Frame Model	Page	Rear Mount Model	Page	Desktop Model	Page
12"					1224L	31
15"	1587C	68	1549L	48	1525L/1527L	35
17"	1787C	70	1747L	50	1725L/1727L	39
17"	1788C	72	1745C	64		
18"			1847L	52		
19"	1987C	74				
19"	1988C	76				

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Hospitality/POS Solutions

Simplifying Your POS Application with Elo TouchSystems

12" LCD Entuitive touchmonitor

Restaurant servers use a touchmonitor station to enter orders, communicate with the kitchen, and reconcile tabs.

From its infancy, touch has been popular in point-of-sale (POS) applications for the restaurant and hospitality industry. Today, POS touch applications are becoming more and more popular in the retail, government, and financial industries. Touchscreens simplify cash-register operation, reduce operator error, and significantly reduce training time, which is especially vital in industries with high employee turnover, such as fast food and retail.

Elo's five-wire resistive AccuTouch technology is the most widely used technology in restaurants, retail stores, hotels, and other POS applications where touch is in daily, high-volume use. AccuTouch offers consistent, drift-free operation and a durable surface that stands up to harsh contaminants and is gasket sealable against liquids. Elo provides a wide selection of Entuitive touchmonitors with AccuTouch five-wire resistive touch technology. Elo touch solutions are also available through a network of authorized POS distributors.

Elo Entuitive Touchmonitors for Point-of-Sale Applications

	CRT		LCD	
Size	Model	Page	Model	Page
12"			1224L	31
12"			1225L	32
12"			1228L	33
15"	1525C	58	1524L	34
15"	1526C	59	1525L/1527L	35
15"			1525L with MSR	36

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Desktop 1224L

1000 Series
12" LCD Touchmonitors

SPECIFICATIONS

Model		1224L
Case/Bezel color		Dark gray
Display type		Active matrix TFT LCD
Display size		12.1" diagonal
Useful screen area	Horizontal	9.7" (246 mm)
	Vertical	7.3" (184.5 mm)
Monitor dimensions	Width	12.3" (312 mm)
	Height (including base)	12.2" (310 mm)
	Depth (including base)	5.7" (146 mm)
Dimensional drawing number		MS500223 (available at www.elotouch.com)
Optimal (native) resolution		800 x 600 at 85 Hz
Other supported resolutions		800 x 600 at 56, 60, 72, or 75 Hz; 720 x 400 at 70 Hz; 640 x 480 at 60, 72, 75, or 85 Hz; 640 x 350 at 70 Hz
Colors		262,000
Brightness	LCD panel	180 cd/m^2
	LCD panel with touchscreen	AccuTouch: 135 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±45° or 90° total
	Vertical (up/down)	–30°/10° or 40° total
Contrast ratio		150:1
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 30–54 kHz; vertical 50–85 Hz
Video bandwidth		56.25 MHz
Power supply		External power supply, 100–240 VAC, 47–63 Hz
Power dissipation		25 W max.
Temperature		Operating 5°C to 35°C; storage –20°C to 60°C
Humidity		Operating 10 to 80%; storage 10 to 90%; noncondensing
Weight (approx.)		Actual 7.3 lb (3.3 kg); shipping 11.2 lb (5.1 kg)
Warranty	Monitor	1 year
	Touch technology	5 years AccuTouch touchscreen
	Backlight lamp life	20,000 hours to half brightness
Other features		Digital on-screen display (OSD); removable base; sealing

ORDERING INFORMATION

	Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
Pedestal base	AccuTouch	Serial	Antiglare	009234-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-Tick, MPR II
Easel base	AccuTouch	Serial	Antiglare	503800-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-Tick, MPR II

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1225L

Desktop

3000 Series
12" LCD Touchmonitor

SPECIFICATIONS

Model		1225L
Case/Bezel color		Beige
Display type		Active matrix TFT LCD
Display size		12.1" diagonal
Useful screen area	Horizontal	9.7" (246 mm)
	Vertical	7.3" (185 mm)
Monitor dimensions	Width	13.4" (340 mm)
	Height (including base)	11.3" (287 mm)
	Depth (including base)	6.7" (170 mm)
Dimensional drawing number		MS500151 (available at www.elotouch.com)
Optimal (native) resolution		800 x 600 at 60, 72, or 75 Hz
Other supported resolutions		640 x 480 at 60, 72, or 75 Hz; 640 x 480 at 67 Hz (Mac); 640 x 480 at 56 or 60 Hz (PC 98)
Colors		16.7 million
Brightness	LCD panel	250 cd/m^2
	LCD panel with touchscreen	AccuTouch: 188 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±30° or 60° total
	Vertical (up/down)	10°/–20° or 30° total
Contrast ratio		100:1
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female); Universal Mac adapter available separately
Scanning frequency		Horizontal 24–50 kHz; vertical 55–85 Hz
Video bandwidth		50 MHz
Power supply		External power supply, 100–240 VAC, 50–60 Hz
Power dissipation		20 W max.
Temperature		Operating 10°C to 40°C; storage –20°C to 60°C
Humidity		Operating 85%; storage 90%; noncondensing
Weight (approx.)		Actual 10.0 lb (5.0 kg); shipping 17.0 lb (8.5 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen
	Backlight lamp life	30,000 hours at full brightness
Other features		Digital on-screen display (OSD); two built-in 1 W speakers; removable base; sealing; VESA mounting; adapter and 75 mm VESA mount available from Ergotron—part #60-174-007-00

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
AccuTouch	Serial	Antiglare	870141-001	UL, cUL, FCC, CE, TÜV-GS

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Desktop

1228L

3000 Series
12" LCD Touchmonitor

SPECIFICATIONS

Model		1228L
Case/Bezel color		Dark gray
Display type		Active matrix TFT LCD
Display size		12.1" diagonal
Useful screen area	Horizontal	9.7" (246 mm)
	Vertical	7.3" (185 mm)
Monitor dimensions	Width	13.4" (340 mm)
	Height (including base)	11.3" (287 mm)
	Depth (including base)	6.7" (170 mm)
Dimensional drawing number		MS500151 (available at www.elotouch.com)
Optimal (native) resolution		800 x 600 at 60, 72, or 75 Hz
Other supported resolutions		640 x 480 at 60, 72, or 75 Hz; 640 x 480 at 67 Hz (Mac); 640 x 480 at 56 or 60 Hz (PC 98)
Colors		16.7 million
Brightness	LCD panel	250 cd/m^2
	LCD panel with touchscreen	AccuTouch: 188 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±30° or 60° total
	Vertical (up/down)	10°/–20° or 30° total
Contrast ratio		100:1
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female); Universal Mac adapter available separately
Scanning frequency		Horizontal 24–50 kHz; vertical 55–85 Hz
Video bandwidth		50 MHz
Power supply		External power supply: 100–240 VAC, 50–60 Hz
Power dissipation		20 W max.
Temperature		Operating 10°C to 40°C; storage –20°C to 60°C
Humidity		Operating 85%; storage 90%; noncondensing
Weight (approx.)		Actual 10.0 lb (5.0 kg); shipping 17.0 lb (8.5 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen
	Backlight lamp life	30,000 hours at full brightness
Other features		Digital on-screen display (OSD); two built-in 1 W speakers; removable base; sealing; VESA mounting; adapter and 75 mm VESA mount available from Ergotron—part # 60-174-007-00

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
AccuTouch	Serial	Antiglare	A70141-000	UL, cUL, FCC, CE, TÜV-GS

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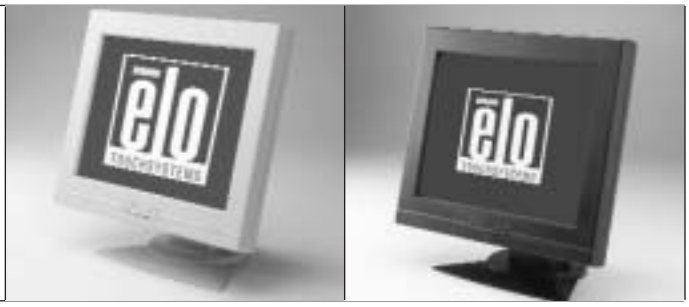
1524L Desktop

1000 Series
15" LCD Touchmonitor



SPECIFICATIONS

Model		1524L
Case/Bezel color		Beige
Display type		Active matrix TFT LCD
Display size		15.0" diagonal
Useful screen area	Horizontal	12.0" (304 mm)
	Vertical	9.0" (228 mm)
Monitor dimensions	Width	15.0" (381 mm)
	Height (including base)	14.6" (370 mm)
	Depth (including base)	7.6" (194 mm)
Dimensional drawing number		MS500230 (available at www.elotouch.com)
Optimal (native) resolution		1024 x 768 at 75 Hz
Other supported resolutions		1024 x 768 at 60, 70, or 75 Hz; 800 x 600 at 56, 60, 72, or 75 Hz; 720 x 400 at 70 Hz; 640 x 480 at 60, 72, or 75 Hz; 640 x 350 at 70 Hz
Colors		16.7 million
Brightness	LCD panel	200 cd/m^2
	LCD panel with touchscreen	AccuTouch: 150 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±60° or 120° total
	Vertical (up/down)	–55°/45° or 100° total
Contrast ratio		250:1
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 31.5–60.2 kHz; vertical 56.3–75 Hz
Video bandwidth		78.75 MHz
Power supply		Internal power supply; 100–240 VAC, 50–60 Hz
Power dissipation		30 W max.
Temperature		Operating 0°C to 40°C; storage –20°C to 60°C
Humidity		Operating 20% to 80%; storage 10% to 90%; noncondensing
Weight (approx.)		Actual 11.9 lb (5.4 kg); shipping 16.5 lb (7.5 kg)
Warranty	Monitor	1 year
	Touch technology	5 years AccuTouch touchscreen
	Backlight lamp life	25,000 hours to half brightness
Other features		Digital on-screen display (OSD); VESA mounting, 75 mm; removable base; sealing

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
AccuTouch	Serial	Antiglare	D20466-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-Tick, MPR II

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Desktop 1525L/1527L

3000 Series
15" LCD Touchmonitors

entuitive Touchmonitors

SPECIFICATIONS

Model		1525L/1527L
Case/Bezel color		Dark gray/Beige
Display type		Active matrix TFT LCD
Display size		15" diagonal
Useful screen area	Horizontal	11.9" (304 mm)
	Vertical	8.9" (228 mm)
Monitor dimensions	Width	15.4" (391 mm)
	Height (including base)	15.4" (391 mm)
	Depth (including base)	8.2" (208 mm)
Dimensional drawing number		MS500104 (available at www.elotouch.com)
Optimal (native) resolution		1024 x 768 at 60, 70, or 75 Hz
Other supported resolutions		1024 x 768 at 65 Hz (Sun); 832 x 624 at 75 Hz (Mac); 800 x 600 at 56, 60, 72, and 75 Hz; 720 x 400 at 70 Hz; 720 x 350 at 70 Hz; 640 x 480 at 60, 66 (Mac), 72, and 75 Hz
Colors		16.7 million
Brightness	LCD panel	300 cd/m^2
	LCD panel with touchscreen	AccuTouch: 255 cd/m^2 (typical); IntelliTouch/CarrollTouch: 285 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±75° or 150° total
	Vertical (up/down)	70°/60° or 130° total
Contrast ratio		450:1
Input video format		VGA/SVGA/XGA analog
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 31.5–60 kHz; vertical 56–75 Hz
Video bandwidth		80 MHz
Power supply		Internal DC power supply; external AC input 100–240 VAC, 50–60 Hz
Power dissipation		30 W max.
Temperature		Operating 10°C to 40°C; storage –30°C to 60°C
Humidity		Operating 20% to 80%; storage 5% to 90%; noncondensing
Weight (approx.)		Actual 15.2 lb (6.9 kg); shipping 21.6 lb (9.8 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch touchscreen; 5 years CarrollTouch touchscreen
	Backlight lamp life	40,000 hours to half brightness
Other features		Digital on-screen display (OSD); two built-in 1 W speakers; removable base; sealing; VESA mounting; wall mountable when installed by qualified personnel User's controls: • side: auto, enter, ±, menu, power • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD time, language (English, German, Spanish, Japanese, French) • OSD disable/enable: power, volume, and/or OSD menu

ORDERING INFORMATION

	Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
Dark gray	AccuTouch	Serial	Antiglare	E75784-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick
Dark gray	IntelliTouch	Serial	Antiglare	E70597-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick
Dark gray	CarrollTouch	Serial	Antiglare	F17099-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick
Dark gray	AccuTouch	USB	Antiglare	947098-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick
Dark gray	IntelliTouch	USB	Antiglare	726256-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick
Beige	AccuTouch	Serial	Antiglare	C42910-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick
Beige	IntelliTouch	Serial	Antiglare	991740-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick

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1525L with MSR

Desktop

3000 Series
15" LCD Touchmonitor
with Magnetic Stripe Reader

SPECIFICATIONS

Model		1525L with MSR
Case/Bezel color		Dark gray
Display type		Active matrix TFT LCD
Display size		15.0" diagonal
Useful screen area	Horizontal	11.9" (304 mm)
	Vertical	8.9" (228 mm)
Monitor dimensions	Width	17.0" (432 mm)
	Height (including base)	15.4" (391 mm)
	Depth (including base)	8.2" (208 mm)
Dimensional drawing number		MS500330 (available at www.elotouch.com)
Optimal (native) resolution		1024 x 768 at 60, 70, or 75 Hz
Other supported resolutions		1024 x 768 at 65 Hz (Sun); 832 x 624 at 75 Hz (Mac); 800 x 600 at 56, 60, 72, and 75 Hz 720 x 400 at 70 Hz; 720 x 350 at 70 Hz; 640 x 480 at 60, 66 (Mac), 72, and 75 Hz
Colors		16.7 million
Brightness	LCD panel	300 cd/m^2
	LCD panel with touchscreen	AccuTouch: 255 cd/m^2 (typical); IntelliTouch: 285 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±75° or 150°
	Vertical (up/down)	70°/60° or 130° total
Contrast ratio		450:1
Input video format		VGA/SVGA/XGA analog video
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 31.5–60 kHz; vertical 56–75 Hz
Video bandwidth		80 MHz
Power supply		Internal DC power supply; external AC input 100–240 VAC, 50–60 Hz
Power dissipation		30 W max.
Temperature		Operating 10°C to 40°C; storage –30°C to 60°C
Humidity		Operating 20% to 80%; storage 5% to 90%; noncondensing
Weight (approx.)		Actual: 15.2 lb (6.9 kg); shipping: 21.6 lb (9.8 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch touchscreen
	Backlight lamp life	40,000 hours to half brightness
Other features		Magnetic stripe reader (reads 3 data tracks); supports USB HID class specification 1.1 and OPOS (serial only); digital on-screen display (OSD); two built-in 1 W speakers; removable base; sealing; VESA mounting; wall mountable when installed by qualified personnel User's controls: • side: auto, enter, ±, menu, power; • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD time, language (English, German, Spanish, Japanese, French); • OSD disable/enable: power, volume, and/or OSD menu

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
AccuTouch	Serial	Antiglare	A40174-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick
IntelliTouch	Serial	Antiglare	A85238-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick
AccuTouch	USB	Antiglare	139882-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick
IntelliTouch	USB	Antiglare	A85217-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick

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Desktop

1526L

entuitive Touchmonitors

5000 Series
15" LCD Touchmonitor—Medical

SPECIFICATIONS

Model		1526L
Case/Bezel color		Beige
Display type		Active matrix TFT LCD
Display size		15" diagonal
Useful screen area	Horizontal	11.9" (304 mm)
	Vertical	8.9" (228 mm)
Monitor dimensions	Width	15.4" (391 mm)
	Height (including base)	15.4" (391 mm)
	Depth (including base)	8.2" (208 mm)
Dimensional drawing number		MS500104 (available at www.elotouch.com)
Optimal (native) resolution		1024 x 768 at 60, 70, or 75 Hz
Other supported resolutions		1024 x 768 at 65 Hz (Sun); 832 x 624 at 75 Hz (Mac); 800 x 600 at 56, 60, 72, and 75 Hz; 720 x 400 at 70 Hz; 720 x 350 at 70 Hz; 640 x 480 at 60, 66 (Mac), 72, and 75 Hz
Colors		16.7 million
Brightness	LCD panel	300 cd/m^2
	LCD panel with touchscreen	AccuTouch: 255 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±75° or 150° total
	Vertical (up/down)	±70/60° or 130° total
Contrast ratio		450:1
Input video format		VGA/SVGA/XGA analog
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 31.5–60 kHz; vertical 56–75 Hz
Video bandwidth		80 MHz
Power supply		External power supply with AC input, 100–240 VAC, 50–60 Hz
Power dissipation		32 W max.
Temperature		Operating –10°C to 40°C; storage –30°C to 60°C
Humidity		Operating 20% to 80%; storage 5% to 90%; noncondensing
Weight (approx.)		Actual 15.2 lb (6.9 kg); shipping 21.6 lb (9.8 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen
	Backlight lamp life	40,000 hours
Other features		Digital on-screen display (OSD); two built-in 1 W speakers; removable base; drip proof (IEC529/IPX1); VESA mounting; wall mountable when installed by qualified personnel; User's controls: • side: auto, enter, ±, menu, power; • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD time, language (English, German, Spanish, Japanese, French); • OSD disable/enable: power, volume, and/or OSD menu

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
AccuTouch	Serial	Antiglare	F65991-000	UL, cUL, CE, CB, FCC-B, UL2601, drip-proof (IEC529/IPX1), CE MDD

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1724L

Desktop

1000 Series
17" LCD Touchmonitors

SPECIFICATIONS

Model		1724L
Case/Bezel color		Dark gray
Display type		Active matrix TFT LCD
Display size		17.0" diagonal
Useful screen area	Horizontal	13.3" (338 mm)
	Vertical	10.6" (270 mm)
Monitor dimensions	Width	15.0" (381 mm)
	Height (including base)	14.6" (370 mm)
	Depth (including base)	7.6" (194 mm)
Dimensional drawing number		MS500251 (available at www.elotouch.com)
Optimal (native) resolution		1280 x 1024 at 60 Hz
Other supported resolutions		1024 x 768 at 60, 70, or 75 Hz; 800 x 600 at 56, 60, 72, or 75 Hz; 720 x 400 at 70 Hz; 640 x 480 at 60, 72, or 75 Hz; 640 x 350 at 70 Hz
Colors		16.7 million
Brightness	LCD panel	250 cd/m^2
	LCD panel with touchscreen	AccuTouch: 200 cd/m^2 (typical); IntelliTouch: 237 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±70° or 140° total
	Vertical (up/down)	–65°/45° or 110° total
Contrast ratio		250:1
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 31.5–60.2 kHz; vertical 56.3–75 Hz
Video bandwidth		135 MHz
Power supply		External power supply, 100–240 VAC, 50–60 Hz
Power dissipation		45 W max.
Temperature		Operating 5°C to 35°C; storage –5°C to 45°C
Humidity		Operating 30% to 80%; storage 5% to 90%; noncondensing
Weight (approx.)		Actual 11.9 lb (7.2 kg); shipping 16.5 lb (9.9 kg)
Warranty	Monitor	1 year
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch touchscreen
	Backlight lamp life	25,000 hours at full brightness
Other features		Digital on-screen display (OSD); removable base; sealing; OSD and power lock/unlock

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
AccuTouch	Serial	Antiglare	E71051-000	UL, cUL, FCC, IC, CE, TÜV-GS, VCCI, C-Tick, UL-AR/S, CB, TCO99
IntelliTouch	Serial	Antiglare	C92543-000	UL, cUL, FCC, IC, CE, TÜV-GS, VCCI, C-Tick, UL-AR/S, CB, TCO99

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Desktop 1725L/1727L

3000 Series
17" LCD Touchmonitors

entuitive Touchmonitors

SPECIFICATIONS

Model		1725L/1727L
Case/Bezel color		Dark gray/Beige
Display type		Active matrix TFT LCD
Display size		17.0" diagonal
Useful screen area	Horizontal	13.3" (338 mm)
	Vertical	10.6" (270 mm)
Monitor dimensions	Width	17.1" (434 mm)
	Height (including base)	16.93" (430 mm)
	Depth (including base)	9.4" (238 mm)
Dimensional drawing number		MS500231 (available at www.elotouch.com)
Optimal (native) resolution		1280 x 1024 at 75 Hz
Other supported resolutions		1024 x 768 at 60, 70, or 75 Hz; 832 x 624 at 75 Hz (Mac); 800 x 600 at 56, 60, 72, or 75 Hz; 720 x 400 at 70 Hz; 640 x 480 at 60, 72, or 75 Hz; 640 x 480 at 66 Hz (Mac)
Colors		16.7 million (24-bit)
Brightness	LCD panel	250 cd/m^2
	LCD panel with touchscreen	AccuTouch: 200 cd/m^2 (typical); IntelliTouch: 230 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±80° or 160°
	Vertical (up/down)	55°/80° or 135° total
Contrast ratio		400:1
Input video format		Analog (no proprietary video card needed) or Digital Video Input (DVI-D)
Input video signal connector		Mini D-Sub 15-Pin (female) or Digital 24-Pin Input
Scanning frequency		Horizontal 31.5–80 kHz; vertical 56–75 Hz
Video bandwidth		135 MHz
Power supply		External power supply, 100–240 VAC, 50–60 Hz, monitor input power 19 V at 2.65 A
Power dissipation		50 W max.
Temperature		Operating 0°C to 40°C; storage –20°C to 60°C
Humidity		Operating 20% to 80%; storage 10% to 90%; noncondensing
Weight (approx.)		Typical 21.6 lb (9.82 kg); shipping 30.6 lb (13.9 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch touchscreen
	Backlight lamp life	30,000 hours
Other features		On-screen display (OSD) (English, German, Spanish, Japanese, French); lockouts for power and user controls; extras include volume, treble, bass, balance; 100 mm or 75 mm M4 VESA display mounting; 100 mm M5 threaded holes on base bottom for table top security; removable base; reversible stand for wall mounting; stand rotates from –5° (from vertical) to 90° (horizontal); 2 watt/channel speakers located in display head; touchscreen sealed to bezel; touchscreen sealed to LCD; User's controls: • side: menu, up, down, select, power • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD time, language (English, German, Spanish, Italian, Japanese, French) • OSD disable/enable: power, volume, and/or OSD menu

ORDERING INFORMATION

	Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
Dark gray	AccuTouch	Serial	Antiglare	954174-000	UL, cUL, FCC, IC, CE, TÜV-GS, VCCI, C-Tick
Dark gray	AccuTouch	USB	Antiglare	069914-000	UL, cUL, FCC, IC, CE, TÜV-GS, VCCI, C-Tick
Dark gray	IntelliTouch	Serial	Antiglare	D00405-000	UL, cUL, FCC, IC, CE, TÜV-GS, VCCI, C-Tick
Dark gray	IntelliTouch	USB	Antiglare	442072-000	UL, cUL, FCC, IC, CE, TÜV-GS, VCCI, C-Tick
Beige	AccuTouch	Serial	Antiglare	482392-000	UL, cUL, FCC, IC, CE, TÜV-GS, VCCI, C-Tick
Beige	AccuTouch	USB	Antiglare	227258-000	UL, cUL, FCC, IC, CE, TÜV-GS, VCCI, C-Tick
Beige	IntelliTouch	Serial	Antiglare	D33055-000	UL, cUL, FCC, IC, CE, TÜV-GS, VCCI, C-Tick
Beige	IntelliTouch	USB	Antiglare	869890-000	UL, cUL, FCC, IC, CE, TÜV-GS, VCCI, C-Tick

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1825L

Desktop

1000 Series
18" LCD Touchmonitor

SPECIFICATIONS

Model		1825L
Case/Bezel color		Beige
Display type		Active matrix TFT LCD
Display size		18.1" diagonal
Useful screen area	Horizontal	14.1" (359 mm)
	Vertical	11.3" (287 mm)
Monitor dimensions	Width	18.7" (475 mm)
	Height (including base)	16.7" (424 mm)
	Depth (including base)	8.3" (211 mm)
Dimensional drawing number		MS500187 (available at www.elotouch.com)
Optimal (native) resolution		1280 x 1024 at 60, 70, 75 Hz
Other supported resolutions		1152 x 900; 1024 x 768; 800 x 600; 640 x 480
Colors		16.7 million
Brightness	LCD panel	235 cd/m^2
	LCD panel with touchscreen	AccuTouch: 200 cd/m^2; IntelliTouch: 220 cd/m^2
Viewing angle (from center)	Horizontal (left/right)	±80° or 160° total
	Vertical (up/down)	±80° or 160° total
Contrast ratio		300:1
Input video format		Dual interface (digital/analog)
Input video signal connector		DVI for digital; 15-Pin HD male for analog
Scanning frequency		Digital: Horizontal 31.5 kHz; vertical 56–85 Hz Analog: Horizontal 56–85; vertical 31.5–64 Hz
Power supply		Internal power supply, 100–240 VAC, 50–60 Hz
Power dissipation		65 W max.
Temperature		Operating 0°C to 40°C; storage –20°C to 60°C
Humidity		Operating 90%; noncondensing
Weight (approx.)		Actual 22.8 lb (10.4 kg)
Warranty	Monitor	1 year
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch touchscreen
	Touch controller	5 years
	Backlight lamp life	25,000 hours to half brightness
Other features		Digital on-screen display (OSD); speakers in head; removable base; ENERGY STAR®; VESA mounting; USB hub

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
IntelliTouch	Serial	Antiglare	983760-000	UL, cUL, FCC
AccuTouch	Serial	Antiglare	969270-000	UL, cUL, FCC

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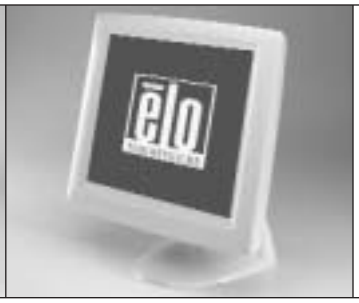

Desktop 1825L/1827L

5000 Series
18" LCD Touchmonitors

entuitive Touchmonitors

SPECIFICATIONS

Model		1825L/1827L
Case/Bezel color		Dark gray/Beige
Display type		Active matrix TFT LCD
Display size		18.1" diagonal
Useful screen area	Horizontal	14.1" (359 mm)
	Vertical	11.3" (287 mm)
Monitor dimensions	Width	17.5" (445 mm)
	Height (including base)	17.5" (445 mm)
	Depth (including base)	9.4" (238 mm)
Dimensional drawing number		MS500290 (available at www.elotouch.com)
Optimal (native) resolution		1280 x 1024 at 60 Hz
Other supported resolutions		1024 x 768 at 65, 70, and 75 Hz; 800 x 600 at 56, 60, 72, and 75, Hz; 720 x 400 at 70 Hz; 720 x 350 at 70 Hz; 640 x 480 at 60, 72, and 75 Hz
Colors		16.7 million
Brightness	LCD panel	235 cd/m^2
	LCD panel with touchscreen	AccuTouch: 188 cd/m^2; IntelliTouch: 210 cd/m^2
Viewing angle (from center)	Horizontal (left/right)	±85° or 170° total
	Vertical (up/down)	±85° or 170° total
Contrast ratio		400:1
Input video format		Analog (no proprietary video card needed); Digital Video Input (DVI-D)
Input video signal connector		Mini D-Sub 15-Pin (female); DVI-D 24-Pin
Scanning frequency		Horizontal 31.5–80 kHz; vertical 56.3–75 Hz
Power supply		External power supply, 100–240 VAC, 50–60 Hz
Power dissipation		50 W max.
Temperature		Operating 0°C to 40°C; storage –20°C to 60°C
Humidity		Operating: 20 to 85%; storage: 5% to 95% noncondensing
Weight (approx.)		Actual: 15.9 lb (7.2 kg); shipping: 21.8 lb (9.9 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch touchscreen
	Backlight lamp life	40,000 hours to half brightness
Other features		On-screen display (OSD) (English, German, Spanish, Japanese, French); lockouts for power and user controls; extras include volume, treble, bass, balance; 100 mm or 75 mm M4 VESA display mounting; 100 mm M5 threaded holes on base bottom for table top security; removable base; reversible stand for wall mounting; stand rotates from –5° (from vertical) to 90° (horizontal); 2 watt/channel speakers located in display head; Touchscreen sealed to bezel; Touchscreen sealed to LCD; User's controls: • side: menu, up, down, select, power • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD time, language (English, German, Spanish, Italian, Japanese, French) • OSD disable/enable: power, volume, and/or OSD menu

ORDERING INFORMATION

	Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
Gray	AccuTouch	Serial	Antiglare	F76629-000	UL/cUL Classified Med, FCC, CE Med, TÜV Med, VCCI, C-Tick, MPRII, CB Med
Gray	AccuTouch	USB	Antiglare	E77380-000	UL/cUL Classified Med, FCC, CE Med, TÜV Med, VCCI, C-Tick, MPRII, CB Med
Gray	IntelliTouch	Serial	Antiglare	A31744-000	UL/cUL Classified Med, FCC, CE Med, TÜV Med, VCCI, C-Tick, MPRII, CB Med
Gray	IntelliTouch	USB	Antiglare	F30617-000	UL/cUL Classified Med, FCC, CE Med, TÜV Med, VCCI, C-Tick, MPRII, CB Med
Beige	AccuTouch	Serial	Antiglare	A70125-000	UL/cUL Classified Med, FCC, CE Med, TÜV Med, VCCI, C-Tick, MPRII, CB Med
Beige	AccuTouch	USB	Antiglare	A06521-000	UL/cUL Classified Med, FCC, CE Med, TÜV Med, VCCI, C-Tick, MPRII, CB Med
Beige	IntelliTouch	Serial	Antiglare	A50146-000	UL/cUL Classified Med, FCC, CE Med, TÜV Med, VCCI, C-Tick, MPRII, CB Med
Beige	IntelliTouch	USB	Antiglare	A46947-000	UL/cUL Classified Med, FCC, CE Med, TÜV Med, VCCI, C-Tick, MPRII, CB Med

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1246L

Rear Mount

3000 Series
12" LCD Touchmonitor

SPECIFICATIONS

Model		1246L
Case/Bezel color		Black; metal bezel and back
Display type		Active matrix TFT LCD
Display size		12.1" diagonal
Useful screen area	Horizontal	9.7" (246 mm)
	Vertical	7.3" (185 mm)
Monitor dimensions	Width	13.2" (335 mm)
	Height	11.0" (278 mm)
	Depth	2.5" (63 mm)
Dimensional drawing number		MS500130 (available at www.elotouch.com)
Optimal (native) resolution		800 x 600 at 60, 70, or 75 Hz
Other supported resolutions		640 x 480 at 60, 70, or 75 Hz
Colors		262, 144 (6-bit)
Brightness	LCD panel	300 cd/m^2
	LCD panel with touchscreen	AccuTouch: 240 cd/m^2; IntelliTouch/SecureTouch: 275 cd/m^2
Viewing angle (from center)	Horizontal (left/right)	±60° or 120° total
	Vertical (up/down)	+40°/–55° or 95° total
Contrast ratio		200:1
Input video format		VGA/SVGA analog
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 56–75 Hz; vertical 25–60 Hz
Power supply		100–240 VAC, 0.4 amp max. 50–60 Hz
Temperature		Operating 0°C to 50°C; storage –25°C to 60°C
Humidity		Operating 90%; storage 90%; noncondensing
Weight (approx.)		Actual 11.9 lb (5.4 kg); shipping 18.4 lb (8.4 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch touchscreen; 10 years SecureTouch touchscreen
	Backlight lamp life	50,000 hours at full brightness
Other features		Digital on-screen display (OSD); sealing

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
IntelliTouch	Serial	Antiglare	935858-000	UL, cUL, FCC, CE, TÜV
IntelliTouch	USB	Antiglare	644304-000	UL, cUL, FCC, CE, TÜV
SecureTouch 0.25"	Serial	Antiglare	750548-000	UL, cUL, FCC, CE, TÜV
SecureTouch 0.25"	USB	Antiglare	651228-000	UL, cUL, FCC, CE, TÜV
AccuTouch	Serial	Antiglare	851018-000	UL, cUL, FCC, CE, TÜV
AccuTouch	USB	Antiglare	988624-000	UL, cUL, FCC, CE, TÜV

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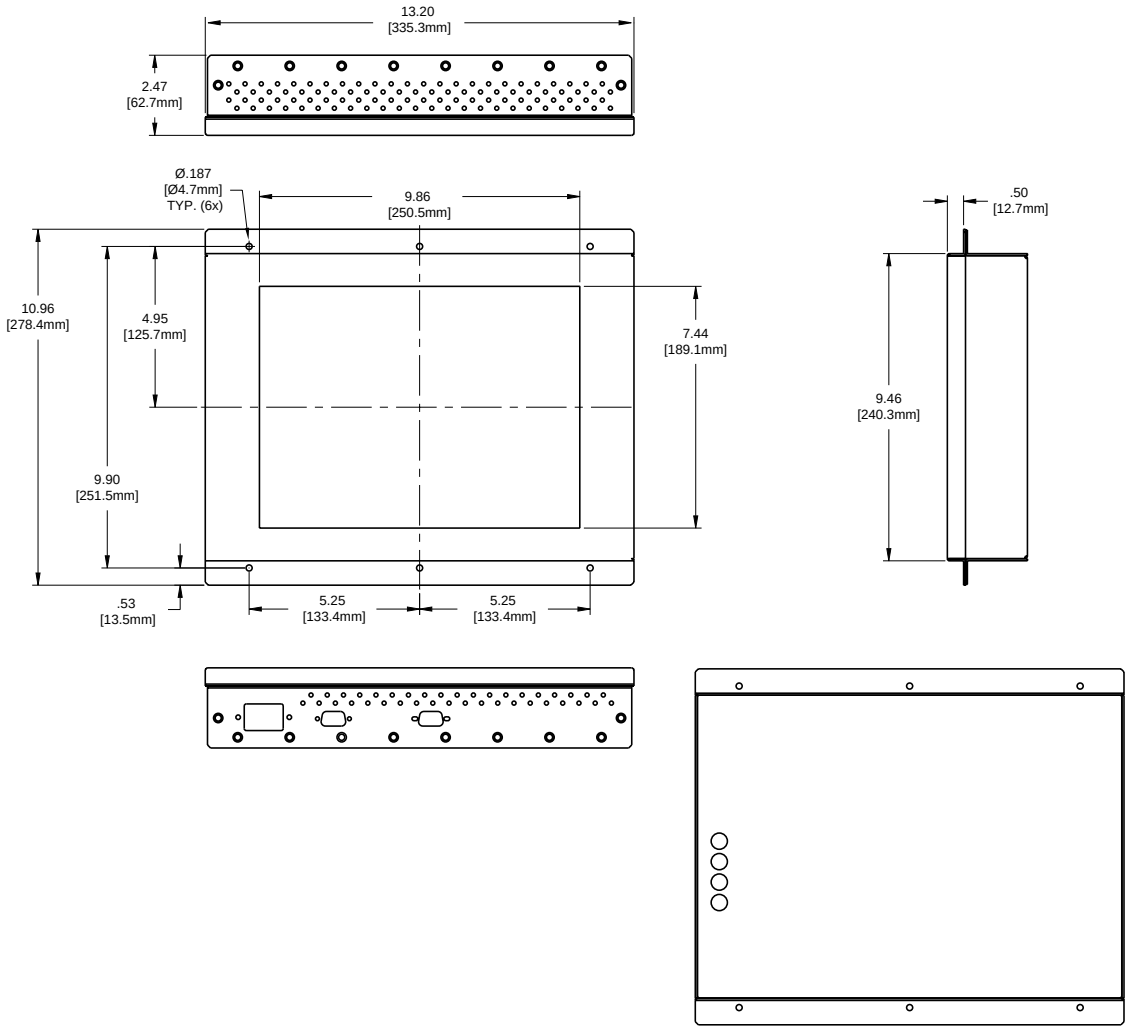
3000 Series
12" LCD Touchmonitor



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1545L

Rear Mount

3000 Series
15" LCD Touchmonitor

SPECIFICATIONS

Model		1545L
Case/Bezel color		Dark gray plastic bezel with metal back
Display type		Active matrix TFT LCD
Display size		15" diagonal
Useful screen area	Horizontal	11.9" (304 mm)
	Vertical	8.9" (228 mm)
Monitor dimensions	Width	15.4" (390 mm); with bracket: 17.24" (438 mm)
	Height	12.9" (328 mm)
	Depth	1.5" (32 mm); with bracket: 2.7" (68 mm)
Dimensional drawing number		MS500108 (available at www.elotouch.com)
Optimal (native) resolution		1024 x 768 at 60, 70, or 75 Hz
Other supported resolutions		1024 x 768 at 65 Hz (Sun); 832 x 624 at 75 Hz (Mac); 800 x 600 at 56, 60, 72, and 75 Hz; 720 x 400 at 70 Hz; 720 x 350 at 70 Hz; 640 x 480 at 60, 66 (Mac), 72, and 75 Hz
Colors		16.7 million
Brightness	LCD panel	300 cd/m^2
	LCD panel with touchscreen	IntelliTouch: 285 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±75° or 150° total
	Vertical (up/down)	70°/60° or 130° total
Contrast ratio		450:1
Input video format		VGA/SVGA/XGA analog
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 32.5–60 kHz; vertical 56–75 Hz
Video bandwidth		80 MHz
Power supply		Internal power supply, external AC input 100–240 VAC, 50–60 Hz
Power dissipation		30 W max.
Temperature		Operating 10°C to 40°C; storage –30°C to 60°C
Humidity		Operating 20% to 80%; storage 5% to 90%; noncondensing
Weight (approx.)		Actual 10.5 lb (4.8 kg); shipping 17.2 lb (7.8 kg)
Warranty	Monitor	3 years
	Touch technology	10 years IntelliTouch touchscreen
	Backlight lamp life	40,000 hours to half brightness
Other features		Digital on-screen display (OSD); sealing; VESA mounting 75 mm; remote OSD on 1.8 m cable; User's controls: • Remote OSD: auto, enter, ±, menu, power • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD Time, language (English, German, Spanish, Japanese, French) • OSD disable/enable: power, volume, and/or OSD controls

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
IntelliTouch	USB	Antiglare	518812-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick
IntelliTouch	Serial	Antiglare	E70581-000	UL, cUL, FCC, IC, CE, TÜV, VCCI, C-Tick

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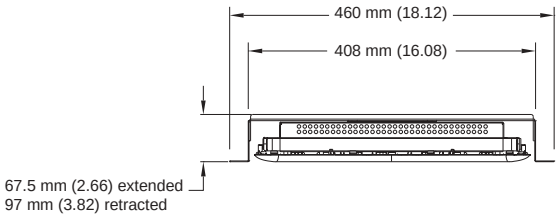
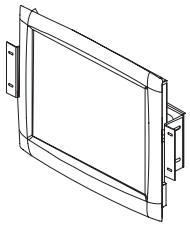
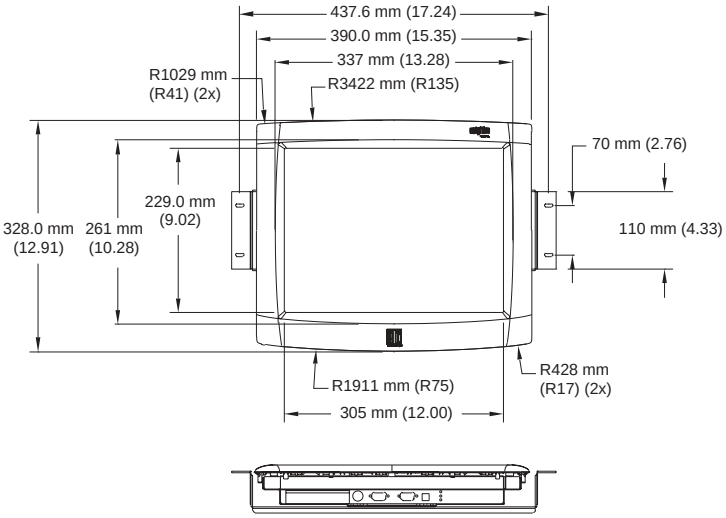
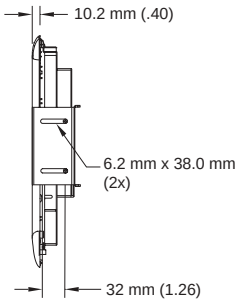
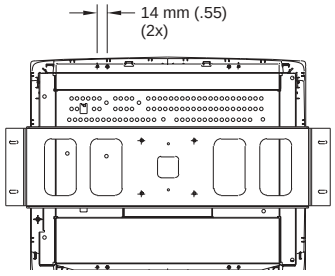
3000 Series
15" LCD Touchmonitor











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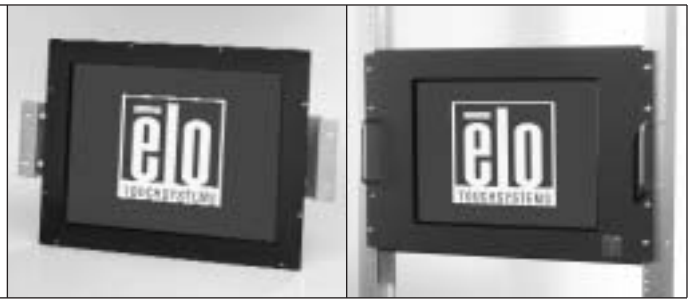
1547L Rear Mount

3000 Series 15" LCD Touchmonitor



SPECIFICATIONS

Model		1547L
Case/Bezel color		Black plastic bezel with metal back
Display type		Active matrix TFT LCD
Display size		15.0" diagonal
Useful screen area	Horizontal	11.97" (304 mm)
	Vertical	8.98" (228 mm)
Monitor dimensions	Width	14.96" (380 mm); with bracket: 17.24" (438 mm)
	Height	11.65" (296 mm)
Dimensional drawing number		MS500235 (available at www.elotouch.com), MS500292 (with rack mount)
Optimal (native) resolution		1024 x 768 at 60, 70, or 75 Hz
Other supported resolutions		1024 x 768 at 65 Hz (Sun); 832 x 624 at 75 Hz (Mac); 800 x 600 at 56, 60, 72, or 75 Hz; 720 x 400 at 70 Hz; 720 x 350 at 70 Hz; 640 x 480 at 60, 66 (Mac), 72, and 75 Hz
Colors		16.7 million (24-bit)
Brightness	LCD panel	300 cd/m^2
	LCD panel with touchscreen	AccuTouch: 255 cd/m^2 (typical); IntelliTouch/SecureTouch: 270 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±75° or 150° total
	Vertical (up/down)	70°/60° or 130° total
Contrast ratio		450:1
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 31.5–60 kHz; vertical 56–75 Hz
Video bandwidth		80 MHz
Power supply		Internal power supply, 100–240 VAC, 50–60 Hz
Power dissipation		30 W max.
Temperature		Operating 0°C to 50°C; storage –30°C to 60°C
Humidity		Operating 20% to 80%; storage 5% to 90%; noncondensing
Weight (approx.)		Actual 10.6 lb (4.8 kg); shipping 17.2 lb (7.8 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch/SecureTouch touchscreen
	Backlight lamp life	40,000 hours to half brightness
Other features		Remote on-screen display (OSD) with 1.8 m cable; VESA mounting 75 mm; 19" rack mount option, part number D84822-000; panel cut-out; exclusive wiper blade for sealing; mounting brackets included; User's controls: • Remote OSD: Auto/Sel, up, down, menu • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD time, language (English, German, Spanish, Japanese, French) • OSD disable/enable: power, volume, and/or OSD menu

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Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
AccuTouch	Serial	Antiglare	516452-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-Tick, MPR II
AccuTouch	USB	Antiglare	C32978-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-Tick, MPR II
IntelliTouch	Serial	Antiglare	823428-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-Tick, MPR II
IntelliTouch	USB	Antiglare	576426-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-Tick, MPR II
SecureTouch	Serial	Antiglare	C80308-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-Tick, MPR II
SecureTouch	USB	Antiglare	A65349-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-Tick, MPR II

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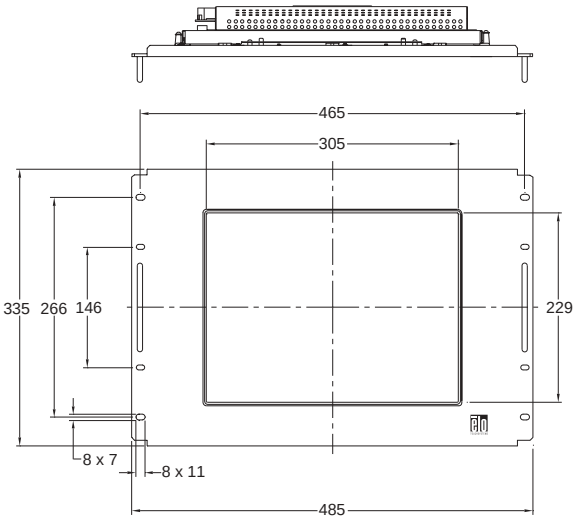
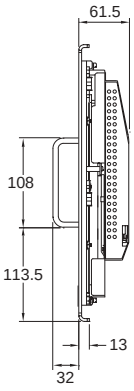
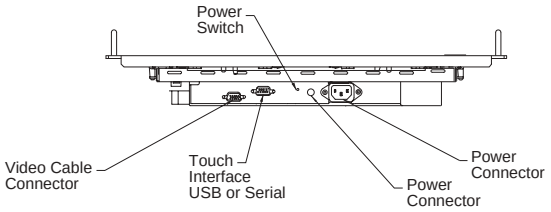
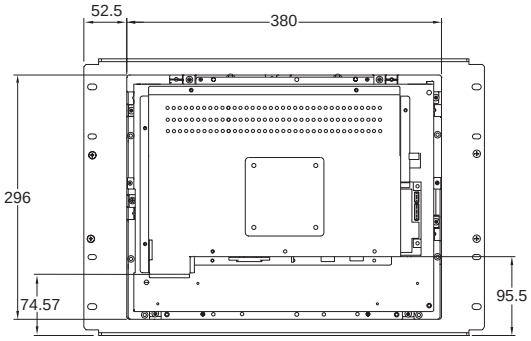
3000 Series
15" LCD Touchmonitor









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1549L

Rear Mount

3000 Series
15" LCD Touchmonitor

SPECIFICATIONS

Model		1549L
Case/Bezel color		Black plastic bezel with metal back
Display type		Active matrix TFT LCD
Display size		15.0" diagonal
Useful screen area	Horizontal	12.1" (308 mm)
	Vertical	9.1" (232 mm)
Monitor dimensions	Width	18.1" (460 mm)
	Height	11.7" (296 mm)
	Depth	2.7" (68 mm)
Dimensional drawing number		MS500291 (available at www.elotouch.com)
Optimal (native) resolution		1024 x 768 at 60, 70, or 75 Hz
Other supported resolutions		1024 x 768 at 65 Hz (Sun); 832 x 624 at 75 Hz (Mac); 800 x 600 at 56, 60, 72, and 75 Hz; 720 x 400 at 70 Hz; 720 x 350 at 70 Hz; 640 x 480 at 60, 66 (Mac), 72, and 75 Hz
Colors		262,144
Brightness	LCD panel	IntelliTouch: 250 cd/m^2
	LCD panel with touchscreen	225 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±80° or 160° total
	Vertical (up/down)	±80° or 160° total
Contrast ratio		400:1
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 31.5–60 kHz; vertical 56–75 Hz
Power supply		Internal power supply 100–240 VAC, 50–60 Hz
Power dissipation		30 W (typical)
Temperature		Operating 0°C to 50°C; storage –20°C to 60°C
Humidity		Operating 20% to 80%; storage 5% to 90%; noncondensing
Weight (approx.)		Actual 10.5 lb (4.8 kg); shipping 17.2 lb (7.8 kg)
Warranty	Monitor	1 year
	Touch technology	10 years IntelliTouch touchscreen
	Backlight lamp life	50,000 hours to half brightness
Other features		Watertight minibezel; remote on-screen display (OSD) with 1.8 m cable; VESA mounting 75 mm; panel cut-out (see MS drawing); mounting brackets included

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
IntelliTouch	Serial	Antiglare	D92347-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-TICK, MPR II

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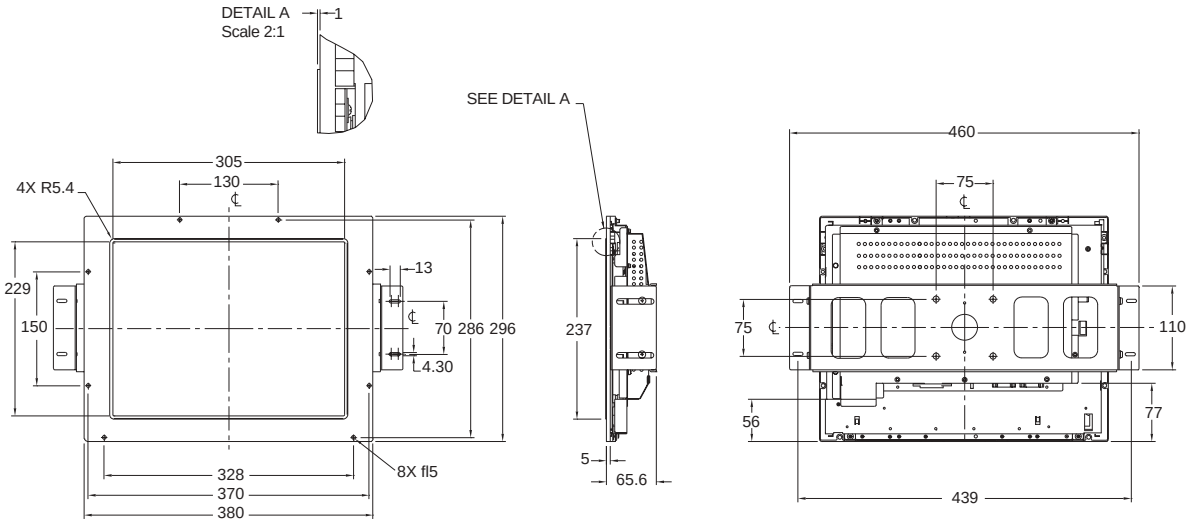
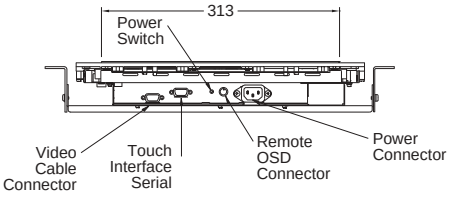
3000 Series
15" LCD Touchmonitor





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1747L Rear Mount

3000 Series 17" LCD Touchmonitor

SPECIFICATIONS

Model		1747L
Case/Bezel color		Black plastic
Display type		Active matrix TFT LCD
Display size		17.0" diagonal
Useful screen area	Horizontal	13.3" (338 mm)
	Vertical	10.6" (270 mm)
Monitor dimensions	Width	16.4" (417 mm); with bracket: 18.7" (474 mm)
	Height	13.4" (341 mm)
	Depth	2.56" (65 mm)
Dimensional drawing number		MS500237 (available at www.elotouch.com), MS500293 (with rack mount)
Optimal (native) resolution		1280 x 1024 at 75 Hz
Other supported resolutions		1024 x 768 at 60, 70, or 75 Hz; 832 x 624 at 75 Hz (Mac); 800 x 600 at 56, 60, 72, or 75 Hz; 720 x 400 at 70 Hz; 640 x 480 at 60, 72, or 75 Hz; 640 x 480 at 66 Hz (Mac)
Colors		16.7 million (24-bit)
Brightness	LCD panel	250 cd/m^2
	LCD panel with touchscreen	IntelliTouch: 230 cd/m^2 (typical); AccuTouch/SecureTouch: 200 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±80° or 160°
	Vertical (up/down)	55°/80° or 135° total
Contrast ratio		400:1
Input video format		Analog (no proprietary video card needed) or Digital Video Input (DVI-D)
Input video signal connector		Mini D-Sub 15-Pin (female) or Digital 24-Pin Input
Scanning frequency		Horizontal 31.5–80 kHz; vertical 56–75 Hz
Video bandwidth		135 MHz
Power supply		External power supply, 100–240 VAC, 50–60 Hz (monitor input power 19 V at 2.65 A)
Power dissipation		50 W max.
Temperature		Operating 0°C to 40°C; storage –20°C to 60°C
Humidity		Operating 20% to 80%; storage 10% to 90%; noncondensing
Weight (approx.)		Actual 20 lb (9.10 kg); shipping 29 lb (13.2 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch/SecureTouch touchscreen
	Backlight lamp life	30,000 hours to half brightness
Other features		Digital on-screen display (OSD); 100 mm or 75 mm VESA mounting; 19" rack mount option; part number D34976-000; remote on-screen display (OSD) with 1.8m cable; exclusive wiper blade for sealing; mounting brackets included; rear mount through bezel or with brackets; User's controls: • Remote OSD: Auto/Sel, up, down, menu • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD time, language (English, German, Spanish, Japanese, French) • OSD disable/enable: power, volume, and/or OSD menu

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
SecureTouch	Serial	Antiglare	185914-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
SecureTouch	USB	Antiglare	207124-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
AccuTouch	Serial	Antiglare	990882-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
AccuTouch	USB	Antiglare	238212-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
IntelliTouch	Serial	Antiglare	945446-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
IntelliTouch	USB	Antiglare	736650-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick

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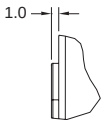
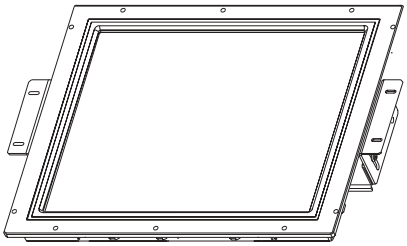
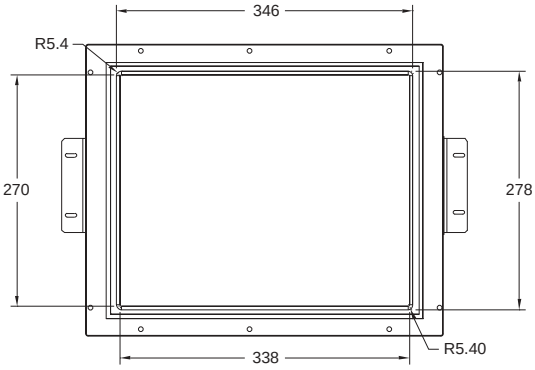
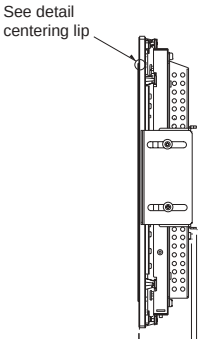
3000 Series
17" LCD Touchmonitor



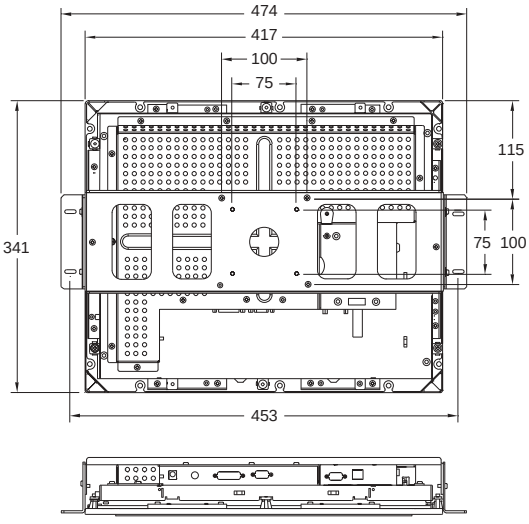
Detail Centering Lip
Scale 4:1







Noted dimensions are for non-touch, AccuTouch, and IntelliTouch only. For SecureTouch and infrared add 3.5 mm to each measurement.



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1847L

Rear Mount

3000 Series
18" LCD Touchmonitor

SPECIFICATIONS

Model		1847L
Case/Bezel color		Black plastic
Display type		Active matrix TFT LCD
Display size		18.1" diagonal
Useful screen area	Horizontal	14.1" (359 mm)
	Vertical	11.3" (287 mm)
Monitor dimensions	Width	19.4" (492 mm)
	Height	14.3" (364 mm)
	Depth	3.0" (77 mm)
Dimensional drawing number		MS500312 (available at www.elotouch.com)
Optimal (native) resolution		1280 x 1024 at 60 Hz
Other supported resolutions		1024 x 768 at 65, 70, or 75 Hz; 800 x 600 at 56, 60, 72, or 75 Hz; 720 x 400 at 70 Hz; 720 x 350 at 70 Hz; 640 x 480 at 60, 72, or 75 Hz
Colors		16.7 million (24-bit)
Brightness	LCD panel	235 cd/m^2
	LCD panel with touchscreen	AccuTouch: 188 cd/m^2 (typical); IntelliTouch: 210 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±85° or 170°
	Vertical (up/down)	85° or 170° total
Contrast ratio		400:1
Input video format		Analog (no proprietary video card needed) or Digital Video Input (DVI-D)
Input video signal connector		Mini D-Sub 15-Pin (female) or Digital 24-Pin Input
Scanning frequency		Horizontal 31.5–80 kHz; vertical 56.3–75 Hz
Video bandwidth		135 MHz
Power supply		External power supply, 100–240 VAC, 50–60 Hz
Power dissipation		50 W max.
Temperature		Operating 0°C to 50°C; storage –20°C to 60°C
Humidity		Operating 20% to 85%; storage 15% to 95%; noncondensing
Weight (approx.)		Actual 15.9 lb (7.2 kg); shipping 21.8 lb (9.9 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch touchscreen
	Backlight lamp life	40,000 hours to half brightness
Other features		Watertight minibezel; 100 mm or 75 mm VESA mounting; remote on-screen display (OSD) with 1.8 m cable; exclusive wiper blade for sealing; mounting brackets included; rear mount through bezel or with brackets; User's controls: • Remote OSD: Auto/Sel, up, down, menu • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD time, language (English, German, Spanish, Italian, Deutsch, Japanese, French) • OSD disable/enable: power, volume, and/or OSD menu

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
AccuTouch	Serial	Antiglare	E47366-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
AccuTouch	USB	Antiglare	D60952-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
IntelliTouch	Serial	Antiglare	A61734-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
IntelliTouch	USB	Antiglare	A81302-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick

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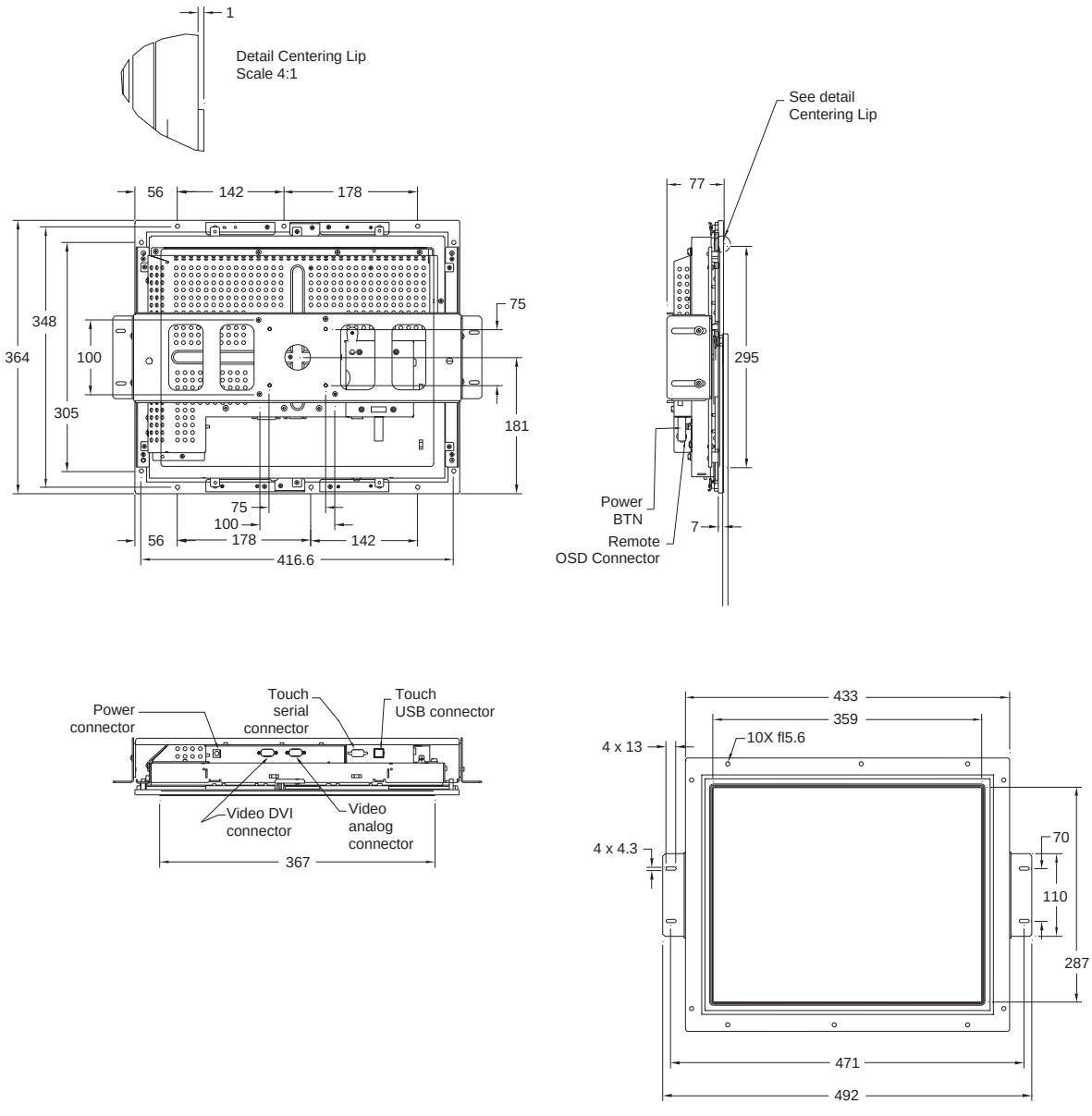
3000 Series
18" LCD Touchmonitor



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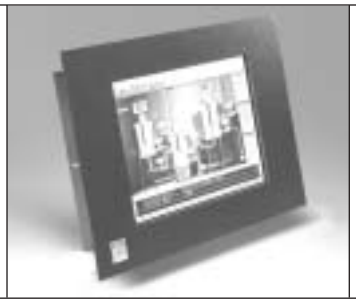
1266L

Panel Mount

3000 Series
12" LCD Touchmonitor



SPECIFICATIONS

Model		1266L
Case/Bezel color		Black, metal bezel
Display type		Active matrix TFT LCD
Display size		12.1" diagonal
Useful screen area	Horizontal	9.7" (246 mm)
	Vertical	7.3" (184 mm)
Monitor dimensions	Width	15.2" (386 mm)
	Height	11.4" (290 mm)
	Depth	2.5" (63 mm)
Dimensional drawing number		MS500131 (available at www.elotouch.com)
Optimal (native) resolution		800 x 600 at 60, 70, or 75 Hz
Other supported resolutions		640 x 480 at 60, 70, or 75 Hz
Colors		262, 144 (6-bit)
Brightness	LCD panel	300 cd/m^2
	LCD panel with touchscreen	AccuTouch: 240 cd/m^2 (typical); IntelliTouch/SecureTouch: 275 cd/m^2
Viewing angle (from center)	Horizontal (left/right)	±60° or 120° total
	Vertical (up/down)	+40°/–55° or 95° total
Contrast ratio		200:1
Input video format		VGA/SVGA analog
Scanning frequency		Horizontal 25–60 Hz; vertical 56–75 Hz
Power supply		100–240 VAC, 0.4 amp max. 50–60 Hz
Temperature		Operating 0°C to 50°C; storage –25°C to 60°C
Humidity		Operating 90%; noncondensing
Weight (approx.)		Actual 11.9 lb (5.4 kg); shipping 18.9 lb (8.6 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch touchscreen; 10 years SecureTouch touchscreen
	Backlight lamp life	50,000 hours at full brightness
Other features		Digital on-screen display (OSD); sealing

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
IntelliTouch	Serial	Antiglare	414918-000	UL, cUL, FCC, CE, TÜV
IntelliTouch	USB	Antiglare	692116-000	UL, cUL, FCC, CE, TÜV
SecureTouch 0.25"	Serial	Antiglare	621520-000	UL, cUL, FCC, CE, TÜV
SecureTouch 0.25"	USB	Antiglare	570076-000	UL, cUL, FCC, CE, TÜV
AccuTouch	Serial	Antiglare	499234-000	UL, cUL, FCC, CE, TÜV
AccuTouch	USB	Antiglare	092802-000	UL, cUL, FCC, CE, TÜV

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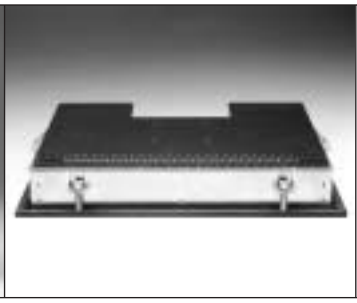

Panel Mount 1566L

3000 Series
15" LCD Touchmonitor

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SPECIFICATIONS

Model		1566L
Case/Bezel color		Black, metal bezel and back
Display type		Active matrix TFT LCD
Display size		15" diagonal
Useful screen area	Horizontal	11.97" (304 mm)
	Vertical	8.9" (228 mm)
Monitor dimensions	Width	17.57" (446 mm)
	Height	13.99" (355 mm)
	Depth	2.52" (64 mm)
Dimensional drawing number		MS500249 (available at www.elotouch.com)
Optimal (native) resolution		1024 x 768 at 60, 70, or 75 Hz
Other supported resolutions		1024 x 768 at 75 Hz (Sun); 832 x 624 at 75 Hz (Mac); 800 x 600 at 56, 60, 72, or 75 Hz; 720 x 400 at 70 Hz; 720 x 350 at 70 Hz; 640 x 480 at 60, 66 (Mac), 72, or 75 Hz
Colors		16 million (24-bit)
Brightness	LCD panel	300 cd/m^2
	LCD panel with touchscreen	AccuTouch: 255 cd/m^2
Viewing angle (from center)	Horizontal (left/right)	±75° or 150° total
	Vertical (up/down)	±60° or 130° total
Contrast ratio		450:1
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 31.5–60 kHz; vertical 56–75 Hz
Power supply		Internal power supply, 100–240 VAC, 50–60 Hz
Power dissipation		30 W max.
Temperature		Operating 0°C to 50°C; storage –30°C to 60°C
Humidity		Operating 20% to 80%; storage 5% to 90°C; 90% at 35°C; noncondensing
Weight (approx.)		Actual 20.0 lb (9.0 kg); shipping 30.0 lb (14.0 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen
	Backlight lamp life	40,000 hours
Other features		Remote on-screen display (OSD) with 1.8 m cable; sealing; VESA mounting 75 mm; panel cut-out; exclusive wiper blade for sealing; mounting brackets included; User's controls: • Remote OSD: Auto/Sel, up, down, menu • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD Time, language (English, German, Spanish, Japanese, French) • OSD disable/enable: power, volume, and/or OSD controls

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
AccuTouch	Serial	Antiglare	198846-000	UL,* cUL* (NEMA 4/4X/12), FCC-B, CE-B, C-Tick, VCCI, TÜV-Bauart (IP65)

* ITE recognized component.

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1567L

Panel Mount

3000 Series
15" LCD Touchmonitor

SPECIFICATIONS

Model		1567L
Case/Bezel color		Black hard anodized aluminum (5052-H32) front panel 4.8 mm thick
Display type		Active matrix TFT LCD
Display size		15.0" diagonal
Useful screen area	Horizontal	11.97" (304 mm)
	Vertical	8.97" (228 mm)
Monitor dimensions	Width	15.75" (400 mm); with bracket: 17.24" (438 mm)
	Height	12.44" (316 mm)
Dimensional drawing number		MS500236 (available at www.elotouch.com)
Optimal (native) resolution		1024 x 768 at 60, 70, or 75 Hz
Other supported resolutions		1024 x 768 at 65 Hz (Sun); 832 x 624 at 75 Hz (Mac); 800 x 600 at 56, 60, 72, or 75 Hz; 720 x 400 at 70 Hz; 720 x 350 at 70 Hz; 640 x 480 at 60, 66 (Mac), 72, and 75 Hz
Colors		16.7 million (24-bit)
Brightness	LCD panel	300 cd/m^2
	LCD panel with touchscreen	AccuTouch: 255 cd/m^2 (typical); IntelliTouch/SecureTouch: 270 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±75° or 150° total
	Vertical (up/down)	70°/60° or 130° total
Contrast ratio		450:1
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Scanning frequency		Horizontal 31.5–60 kHz; vertical 56–75 Hz
Video bandwidth		80 MHz
Power supply		Internal power supply, 100–240 VAC, 50–60 Hz
Power dissipation		30 W max.
Temperature		Operating 0°C to 50°C; storage –30°C to 60°C
Humidity		Operating 20% to 80%; storage 5% to 90%; noncondensing
Weight (approx.)		Actual 10.6 lb (4.8 kg); shipping 17.2 lb (7.8 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen; 10 years IntelliTouch/SecureTouch touchscreen
	Backlight lamp life	40,000 hours to half brightness
Other features		Remote on-screen display (OSD) with 1.8 m cable; VESA mounting 75 mm; panel cut-out; exclusive wiper blade for sealing; mounting brackets included; User's controls: • Remote OSD: • Auto/Sel, up, down, menu • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD time, language (English, German, Spanish, Japanese, French) • OSD disable/enable: power, volume, and/or OSD menu

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
AccuTouch	Serial	Antiglare	057710-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-TICK, MPR II
AccuTouch	USB	Antiglare	432574-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-TICK, MPR II
IntelliTouch	Serial	Antiglare	046906-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-TICK, MPR II
IntelliTouch	USB	Antiglare	252302-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-TICK, MPR II
SecureTouch	Serial	Antiglare	463718-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-TICK, MPR II
SecureTouch	USB	Antiglare	073496-000	UL, cUL, FCC, CE, TÜV-GS, VCCI, C-TICK, MPR II

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Panel Mount

1767L

3000 Series
17" LCD Touchmonitor

entuitive Touchmonitors

SPECIFICATIONS

Model		1767L
Case/Bezel color		Black anodized metal aluminum (5052-H32) front panel 4.8 mm thick
Display type		Active matrix TFT LCD
Display size		17.0" diagonal
Useful screen area	Horizontal	13.3" (338 mm)
	Vertical	10.6" (270 mm)
Monitor dimensions	Width	17.2" (437 mm); with brackets: 18.7" (474 mm)
	Height	14.2" (361 mm)
	Depth	2.17" (55 mm)
Dimensional drawing number		MS500238 (Available @ www.elotouch.com)
Optimal (native) resolution		1280 x 1024 at 75 Hz
Other supported resolutions		1024 x 768 at 60, 70, or 75 Hz; 832 x 624 at 75 Hz; 800 x 600 at 56, 60, 72, or 75 Hz; 720 x 400 at 70 Hz; 640 x 480 at 60, 72, or 75 Hz; 640 x 480 at 66 Hz (Mac)
Colors		16.7 million (24-bit)
Brightness	LCD panel	250 cd/m^2
	LCD panel with touchscreen	AccuTouch: 200 cd/m^2 (typical); IntelliTouch: 230 cd/m^2 (typical); SecureTouch: 230 cd/m^2 (typical)
Viewing angle (from center)	Horizontal (left/right)	±80° or 160°
	Vertical (up/down)	55°/80° or 135° total
Contrast ratio		400:1
Input video format		Analog (no proprietary video card needed) or Digital Video Input (DVI-D)
Input video signal connector		Mini D-Sub 15-Pin (female) or Digital 24-Pin
Scanning frequency		Horizontal 31.5–80 kHz; vertical 56–75 Hz
Video bandwidth		135 MHz
Power supply		External power supply, 100–240 VAC, 50–60 Hz (monitor input power 19V at 2.65A)
Power dissipation		50 W max.
Temperature		Operating 0°C to 40°C; storage –20°C to 60°C
Humidity		Operating 20% to 80%; storage 10% to 90%; non-condensing
Weight (approx.)		Actual 20 lb (9.1 kg); shipping 29 lb (13.2 kg)
Warranty	Monitor	3 years
	Touch technology	5 years AccuTouch touchscreen, 10 years IntelliTouch/SecureTouch touchscreen
	Backlight lamp life	30,000 hours to half brightness
Other features		Digital on-screen display (OSD); 100 mm or 75 mm VESA mounting; remote on-screen display (OSD) with 1.8 m cable; exclusive wiper blade for sealing; mounting brackets included; User's controls: • Remote OSD: Auto/Sel, up down, menu • OSD: contrast, brightness, H/V position, color, temperature, clock, phase, recall, OSD time, language (English, German, Spanish, Japanese, French) • OSD disable/enable: power, volume, and/or OSD menu

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
SecureTouch	Serial	Antiglare	322600-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
SecureTouch	USB	Antiglare	171864-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
AccuTouch	Serial	Antiglare	E43160-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
AccuTouch	USB	Antiglare	A65301-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
IntelliTouch	Serial	Antiglare	974340-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick
IntelliTouch	USB	Antiglare	358362-000	UL, cUL, TÜV-GS, CE, FCC, IC, VCCI, C-Tick

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1525C

Desktop

3000 Series
15" CRT Touchmonitor

SPECIFICATIONS

Model		1525C
Case/Bezel color		Beige
Display type		FST CRT
Display size		15" diagonal
Display area dimensions, nominal	Default	10.2" (260 mm) H x 7.7" (195 mm) V
Monitor dimensions	Width	14.3" (362 mm)
	Height (including base)	12.9" (328 mm)
	Depth (including base)	15.2" (385 mm)
Dimensional drawing number		MS500217 (available at www.elotouch.com)
Highest recommended resolution		800 x 600 at 85 Hz
Resolutions presets (VESA timing)		640 x 480 at 60, 72, 75, or 85 Hz; 800 x 600 at 60, 72, 75, or 85 Hz; 1024 x 768 at 60, 70, 75, or 85 Hz
Dot pitch, nominal		0.28 mm
Video bandwidth		67 MHz
Scanning frequency		Horizontal 30–70 kHz; vertical 50–160 Hz
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Power supply		90–264 VAC, 50–60 Hz
Power dissipation		70 W max.
Temperature		Operating 0°C to 40°C; storage –40°C to 60°C
Humidity		Operating 10% to 90%; storage 10% to 90%; noncondensing
Weight (approx.)		Actual: 29 lb (13.0 kg); shipping 33 lb (15.0 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch; 5 years AccuTouch touchscreen
Other features		100% light transmission (iTouch) with no parallax; digital on-screen display (OSD) with lock out capability; Power Save function; rigid (removable) base; innovative touchscreen sealing; VESA DDC 1/2 B Plug and Play

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
iTouch	Serial	Antireflective	396036-000	UL, cUL, FCC, CE, CISPR22 Class B, TÜV-GS, MPR II (ITE per IEC/EN 60950)
iTouch	USB	Antireflective	634572-000	UL, cUL, FCC, CE, CISPR22 Class B, TÜV-GS, MPR II (ITE per IEC/EN 60950)
AccuTouch	Serial	Antiglare	748998-000	UL, cUL, FCC, CE, CISPR22 Class B, TÜV-GS, MPR II (ITE per IEC/EN 60950)
AccuTouch	USB	Antiglare	630062-000	UL, cUL, FCC, CE, CISPR22 Class B, TÜV-GS, MPR II (ITE per IEC/EN 60950)

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Desktop

1526C

entuitive Touchmonitors

3000 Series
15" CRT Touchmonitor

SPECIFICATIONS

Model		1526C
Case/Bezel color		Dark gray
Display type		FST CRT
Display size		15" diagonal
Display area dimensions, nominal	Default	10.2" (260 mm) H x 7.7" (195 mm) V
Monitor dimensions	Width	14.3" (362 mm)
	Height (including base)	12.9" (328 mm)
	Depth (including base)	15.2" (385 mm)
Dimensional drawing number		MS500217 (available at www.elotouch.com)
Highest recommended resolution		800 x 600 at 85 Hz
Resolutions presets (VESA timing)		640 x 480 at 60, 72, 75, or 85 Hz; 800 x 600 at 60, 72, 75, or 85 Hz; 1024 x 768 at 60, 70, 75, or 85 Hz
Dot pitch, nominal		0.28 mm
Video bandwidth		67 MHz
Scanning frequency		Horizontal 30–70 kHz; vertical 50–160 Hz
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Power supply		90–264 VAC, 50–60 Hz
Power dissipation		70 W max.
Temperature		Operating 0°C to 40°C; storage –40°C to 60°C
Humidity		Operating 10% to 90%; storage 10% to 90%; noncondensing
Weight (approx.)		Actual: 29 lb (13.0 kg); shipping 33 lb (15.0 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch; 5 years AccuTouch touchscreen
Other features		100% light transmission (iTouch) with no parallax; digital on-screen display (OSD) with lock out capability; Power Save function; rigid (removable) base; innovative touchscreen sealing; VESA DDC 1/2 B Plug and Play

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
iTouch	Serial	Antireflective	139862-000	UL, cUL, FCC, CE, CISPR22 Class B, TÜV-GS, MPR II (ITE per IEC/EN 60950)
iTouch	USB	Antireflective	639794-000	UL, cUL, FCC, CE, CISPR22 Class B, TÜV-GS, MPR II (ITE per IEC/EN 60950)
AccuTouch	Serial	Antiglare	263864-000	UL, cUL, FCC, CE, CISPR22 Class B, TÜV-GS, MPR II (ITE per IEC/EN 60950)
AccuTouch	USB	Antiglare	516252-000	UL, cUL, FCC, CE, CISPR22 Class B, TÜV-GS, MPR II (ITE per IEC/EN 60950)

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1725C/1726C Desktop

3000 Series 17" CRT Touchmonitors

SPECIFICATIONS

Model		1725C/1726C
Case/Bezel color		Beige/dark gray
Display type		FST CRT
Display size		17" diagonal
Display area dimensions, nominal	Default	11.8" (300 mm) H x 8.9" (225 mm) V
Monitor dimensions	Width	15.9" (404 mm)
	Height (including base)	14.2" (360 mm)
	Depth (including base)	16.8" (426 mm)
Dimensional drawing number		MS500218 (available at www.elotouch.com)
Highest recommended resolution		1024 x 768 at 85 Hz
Resolution presets		640 x 480 at 60, 72, 75, or 85 Hz; 800 x 600 at 60, 72, 75, or 85 Hz; 1024 x 768 at 60, 70, 75, or 85 Hz; 1152 x 864 at 75 Hz; 1280 x 1024 at 60 Hz
Dot pitch, nominal		0.27 mm
Video bandwidth		67 MHz
Scanning frequency		Horizontal 30–70 kHz; vertical 50–160 Hz
Input video format/connector		Analog (no proprietary video card needed)
Input power connector		Mini D-Sub 15-Pin (female)
Power supply		90–264 VAC, 50–60 Hz
Power dissipation		75 W max.
Temperature		Operating 0°C to 40°C; storage –40°C to 60°C
Humidity		Operating 10% to 90%; storage 10% to 90%; noncondensing
Weight (approx.)		Actual 32 lb (14.5 kg); shipping 37 lb (17.0 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch; 5 years AccuTouch touchscreen
Other features		100% light transmission (iTouch) with no parallax; digital on-screen display (OSD) with lock out capability; Power Save function; rigid (removable) base; innovative touchscreen sealing; VESA DDC 1/2 B Plug and Play

ORDERING INFORMATION

	Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
Beige	iTouch	Serial	Antireflective	045182-000	UL, cUL, FCC, CE, TÜV-GS, MPR II
Beige	iTouch	USB	Antireflective	454000-000	UL, cUL, FCC, CE, TÜV-GS, MPR II
Beige	AccuTouch	Serial	Antiglare	872230-000	UL, cUL, FCC, CE, TÜV-GS, MPR II
Beige	AccuTouch	USB	Antiglare	421496-000	UL, cUL, FCC, CE, TÜV-GS, MPR II
Dark gray	iTouch	Serial	Antireflective	D95678-000	UL, cUL, FCC, CE, TÜV-GS, MPR II
Dark gray	iTouch	USB	Antireflective	D90404-000	UL, cUL, FCC, CE, TÜV-GS, MPR II
Dark gray	AccuTouch	Serial	Antiglare	C25599-000	UL, cUL, FCC, CE, TÜV-GS, MPR II
Dark gray	AccuTouch	USB	Antiglare	816802-000	UL, cUL, FCC, CE, TÜV-GS, MPR II

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Desktop

2125C

entuitive Touchmonitors

3000 Series
21" CRT Touchmonitor

SPECIFICATIONS

Model		2125C
Case/Bezel color		Beige
Display type		FST CRT
Display size		21.0" diagonal
Display area dimensions, nominal	Default	14.96" (380 mm) H x 11.2" (285 mm) V
Monitor dimensions	Width	19.68" (500 mm)
	Height (including base)	19.48" (495 mm)
	Depth (including base)	19.09" (485 mm)
Dimensional drawing number		MS500197 (available at www.elotouch.com)
Highest recommended resolution		1280 x 1024 at 85 Hz
Resolution presets		1600 x 1200 at 85 Hz
		1280 x 1024 at 85 Hz (SXGA)
		1024 x 768 at 85 Hz (XGA)
		800 x 600 at 85 Hz (VESA)
Dot pitch, nominal		0.25 mm
Video bandwidth		230 MHz
Scanning frequency		Horizontal 31–107 kHz; vertical 50–150 Hz
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Power supply		90–264 VAC, 47–63 Hz
Power dissipation		145 W max.
Temperature		Operating 0°C to 40°C; storage –20°C to 60°C
Humidity		Operating 35% to 80%; noncondensing
Weight (approx.)		Actual 53.6 lb (24.3 kg); shipping 64.6 lb (29.3 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch
Other features		Digital on-screen display (OSD); removable base; sealing; ENERGY STAR; VESA DPMS (included on external controller version only); VESA DDC 1/2 B Plug and Play; ISO 9241/3

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
iTouch	Serial	Antireflective	074698-000	UL, cUL, FCC-B, VCCI, C-Tick, CE, TÜV-GS, MPR II, TCO 99

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1545C

Rear Mount

3000 Series
15" CRT Touchmonitor

SPECIFICATIONS

Model		1545C
Case/Bezel color		Metal/black
Display type		FST CRT
Display size		15.0" diagonal
Display area dimensions, nominal	Default	10.2" (260 mm) H x 7.7" (195 mm) V
	Maximum	10.7" (272 mm) H x 8.1" (205 mm) V
Monitor dimensions	Width	14.9" (380 mm)
	Height	12.1" (307 mm)
	Depth	15.6" (397 mm)
Dimensional drawing number		MS500143 (available at www.elotouch.com)
Highest recommended resolution		1024 x 768 at 85 Hz
Resolution presets		1280 x 1024 at 65 Hz (PC)
		1024 x 768 at 85 Hz (PC)
		1024 x 768 at 75 Hz (Mac)
Dot pitch, nominal		0.28 mm
Video bandwidth		110 MHz
Scanning frequency		Horizontal 30–70 kHz; vertical 50–150 Hz
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Power supply		90–264 VAC, 50–60 Hz
Power dissipation		80 W max.
Temperature		Operating 10°C to 40°C; storage –20°C to 60°C
Humidity		Operating 35% to 80%; storage 5% to 90%; noncondensing
Weight (approx.)		Actual 33.0 lb (15.0 kg); shipping 40.0 lb (18.0 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch
Other features		Digital on-screen display (OSD); ENERGY STAR; VESA DPMS/NUTEK; VESA DDC 1/2 B Plug and Play; ISO 9241/3

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
iTouch	Serial	Antireflective	345362-000	UL, cUL, FCC, CE, TÜV-GS, MPR II
iTouch	USB	Antireflective	888284-000	UL, cUL, FCC, CE, TÜV-GS, MPR II

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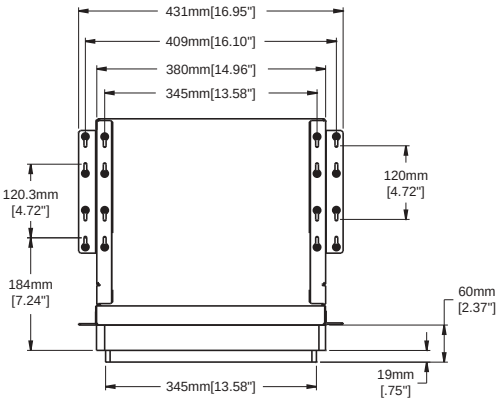
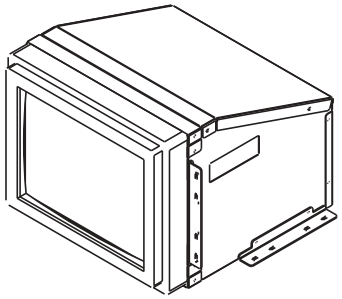
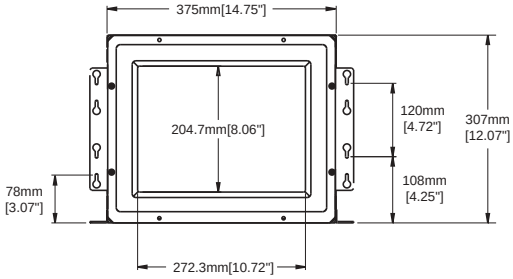
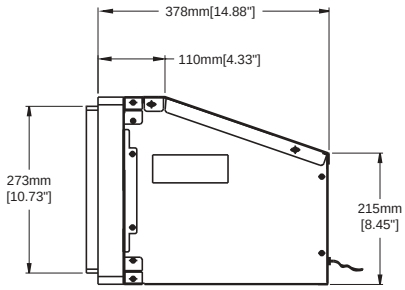
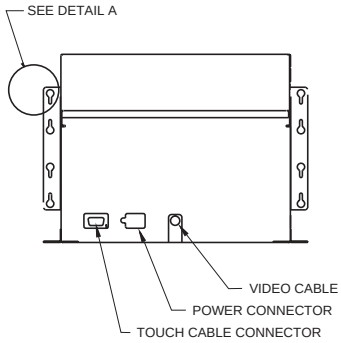
3000 Series
15" CRT Touchmonitor

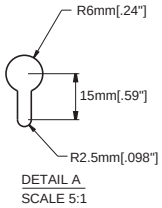












NOTE:
BEZEL IS BLACK, METAL IS CRS PRE-PLATE,
TOP IS ALUMINUM, ANODIZED.

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Touchmonitors

1745C

Rear Mount

3000 Series
17" CRT Touchmonitor

SPECIFICATIONS

Model		1745C
Case/Bezel color		Metal/black
Display type		FST CRT
Display size		17.0" diagonal
Display area dimensions, nominal	Default	12.0" (305 mm) H x 9.0" (229 mm) V
	Maximum	12.2" (311 mm) H x 9.1" (230 mm) V
Monitor dimensions	Width	16.5" (420 mm)
	Height	13.2" (338 mm)
	Depth	16.3" (415 mm)
Dimensional drawing number		MS500144 (available at www.elotouch.com)
Highest recommended resolution		1024 x 768 at 85 Hz (PC)
Resolution presets		1280 x 1024 at 65 Hz (PC)
		1024 x 768 at 85 Hz (PC)
		1024 x 768 at 75 Hz (Mac)
Dot pitch, nominal		0.27 mm
Video bandwidth		110 MHz
Scanning frequency		Horizontal 30–70 kHz; vertical 50–150 Hz
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Power supply		90–264 VAC, 50–60 Hz
Power dissipation		80 W max.
Temperature		Operating 10°C to 40°C; storage –20°C to 60°C
Humidity		Operating 35% to 80%; storage 5% to 85%; noncondensing
Weight (approx.)		Actual 39.0 lb (18.0 kg); shipping 47.0 lb (21.0 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch
Other features		Digital on-screen display (OSD); ENERGY STAR; VESA DPMS/NUTEK; VESA DDC 1/2 B Plug and Play; ISO 9241/3

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
iTouch	Serial	Antireflective	140926-000	UL, cUL, FCC, CE, TÜV-GS, MPR II
iTouch	USB	Antireflective	453624-000	UL, cUL, FCC, CE, TÜV-GS, MPR II

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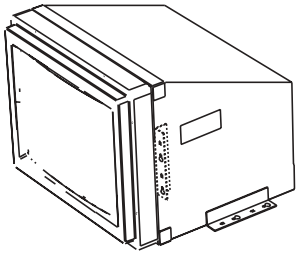
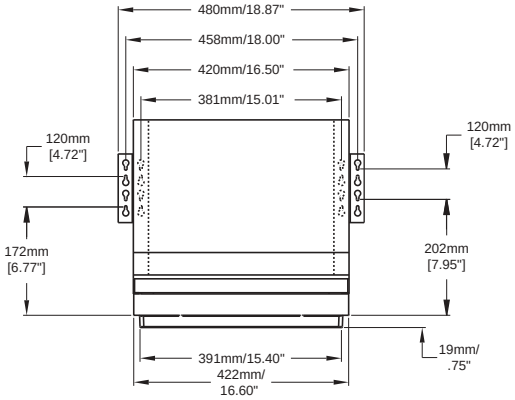
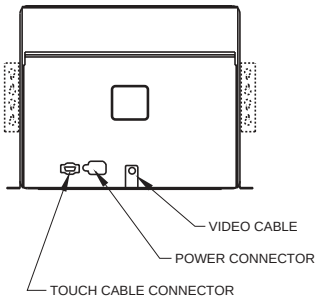
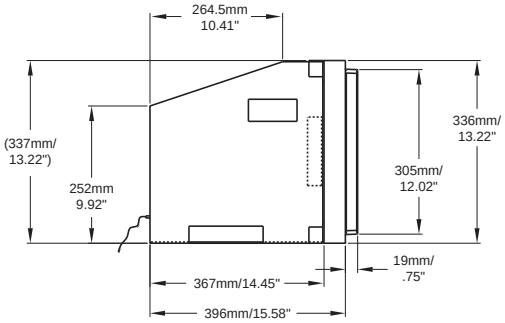
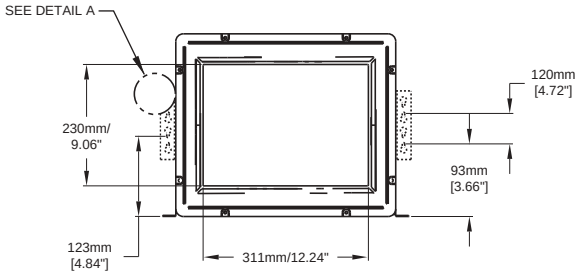
17" CRT Touchmonitor

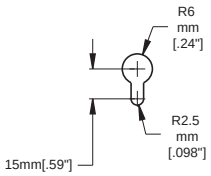












DETAIL A
SCALE 5:1

NOTE:
OSD CONTROLS ACCESSED
FROM BOTTOM OF UNIT

entuitive
Touchmonitors

1945C

Rear Mount

3000 Series
19" CRT Touchmonitor

SPECIFICATIONS

Model		1945C
Case/Bezel color		Metal/black
Display type		FST CRT
Display size		19.0" diagonal
Display area dimensions, nominal	Default	13.8" (350 mm) H x 10.3" (262 mm) V
Monitor dimensions	Width	18.8" (477 mm)
	Height	15.6" (396 mm)
	Depth	17.2" (438 mm)
Dimensional drawing number		MS500150 (available at www.elotouch.com)
Highest recommended resolution		1280 x 1024 at 85 Hz
Resolution presets		1600 x 1200 at 75 Hz
		1024 x 768 at 85 Hz
		800 x 600 at 85 Hz (VESA)
		640 x 480 at 60 Hz (VGA)
Dot pitch, nominal		0.26 mm
Video bandwidth		160 MHz (–3 db)
Scanning frequency		Horizontal 30–96 kHz; vertical 50–160 Hz
Input video format		Analog (no proprietary video card needed)
Input video signal connector		Mini D-Sub 15-Pin (female)
Power supply		100–240 VAC, 50–60 Hz
Power dissipation		100 W typical
Temperature		Operating 5°C to 40°C; storage –20°C to 60°C
Humidity		Operating 20% to 80%
Weight (approx.)		Actual 51.0 lb (23.1 kg); shipping 60.0 lb (27.3 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch
Other features		Digital on-screen display (OSD); sealing; ENERGY STAR; VESA DPMS; VESA DDC 1/2 B Plug and Play; ISO 9241; flexible mounting options on the side, the bottom, and the back

ORDERING INFORMATION

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
iTouch	Serial	Antireflective	459284-000	UR, cUR, FCC, CE, TÜV-Bauart, TCO95, MPR II

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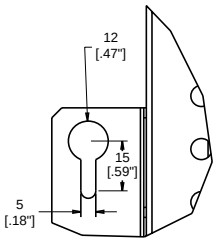
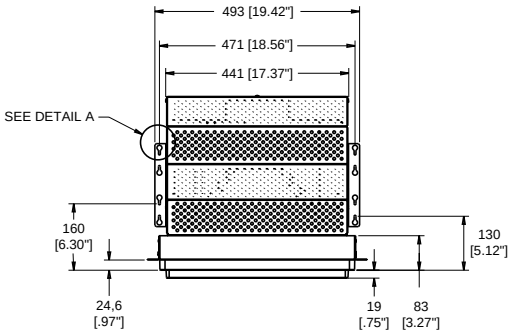
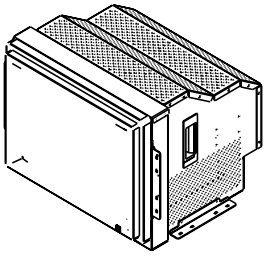
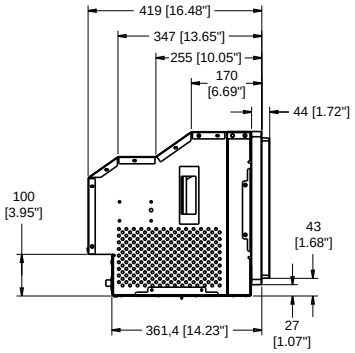
3000 Series
19" CRT Touchmonitor

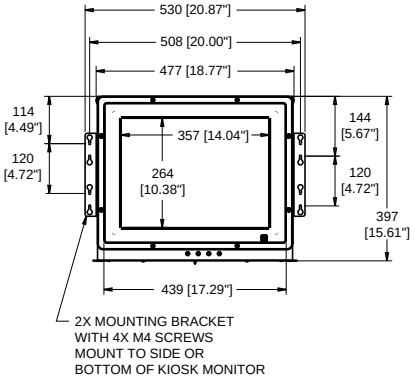


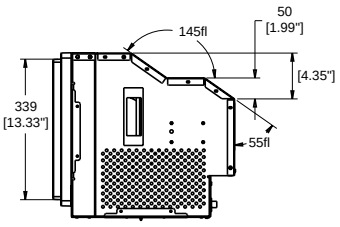
DETAIL A
SCALE 2.000

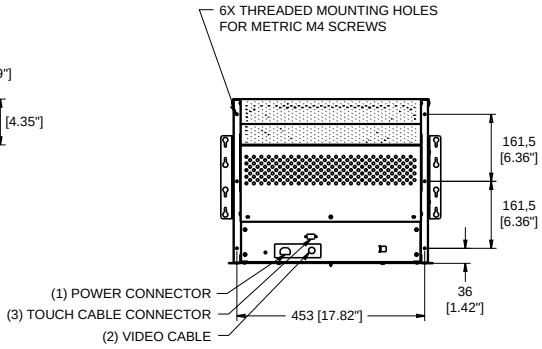












entuitive Touchmonitors

1587C

Open Frame

3000 Series
15" CRT Touchmonitor

SPECIFICATIONS

Model		1587C
Case/Bezel color		Metal open frame/black
Display type		FST CRT
Display size		15.0" diagonal
Display area dimensions	Default	10.6" (270 mm) H x 8.0" (202 mm) V
Monitor dimensions	Width	13.5" (343 mm); with iTouch 13.8" (351.2 mm)
	Height	12.3" (313 mm)
	Depth	14.7" (374.4 mm); with iTouch 14.8" (375.2 mm)
Dimensional drawing number		With iTouch: MS500211; without touch: MS500212
Highest recommended resolution		800 x 600 at 85 Hz
Resolution presets		800 x 600 at 85 Hz (VESA); 640 x 480 at 60 Hz (VGA)
Dot pitch, nominal		0.28 mm
Video bandwidth		65 MHz (–3 db)
Scanning frequency		Horizontal 30–55 kHz; vertical 50–160 Hz
Input video format/connector		Analog; Mini D-Sub 15-Pin (female)
Input power connector		Universal "Mate-N-Lok," AMP P/N 350766
Power supply		100–240 VAC, 50–60 Hz
Power dissipation		60 W typical, 65 W max.
Temperature		Operating 5°C to 55°C; storage –20°C to 65°C
Humidity		Operating 10% to 80%
Weight (approx.)		Actual 25.8 lb (11.7 kg); shipping 31.3 lb (14.2 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch
Other features, video		Watertight minibezel; diagnostic LED; multilingual remote on-screen display (OSD); built-in power, deflection, and video test; video diagnostic pin; ENERGY STAR; VESA DPMS: VESA DDC 1/2 B Plug and Play
Other features, touch		Diagnostic LED

ORDERING INFORMATION: TOUCHMONITORS AND ACCESSORIES

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
iTouch	Serial	Antireflective	A65341-000	FCC/ICES-03: Class B, UL/cUL (*Recognized component), TÜV-Bauart, CE, VCCI, C-Tick, MPR II, DHHS, Demko

Accessories	Elo Part Number
Bracket	P/N C51251-000
Power cables	P/N 918850-000
Repair kit	P/N F01871-000
Square bezel	P/N C57638-000

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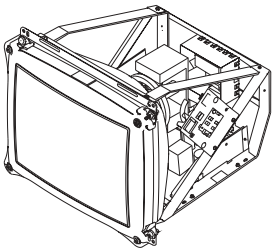
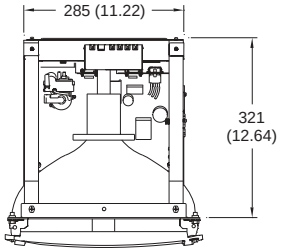
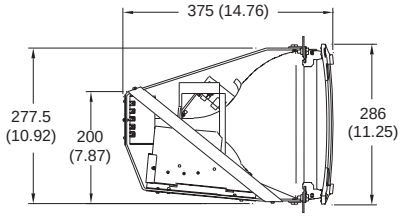
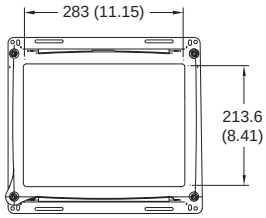
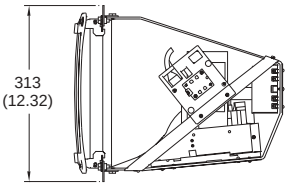
3000 Series
15" CRT Touchmonitor

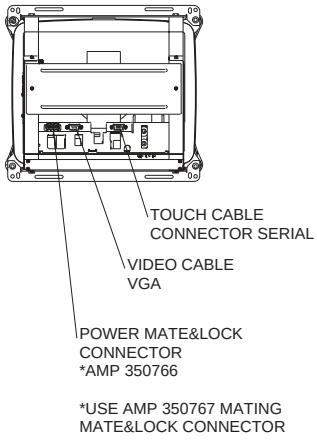


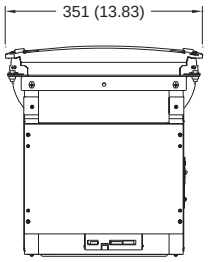












entuitive
Touchmonitors

1787C

Open Frame

3000 Series
17" CRT Touchmonitor

SPECIFICATIONS

Model		1787C
Case/Bezel color		Metal open frame/back
Display type		FST CRT
Display size		17.0" diagonal
Display area dimensions	Default	11.8" (300 mm) H x 8.86" (225 mm) V
Monitor dimensions	Width	15.2" (387 mm), with iTouch 15.6" (397 mm)
	Height	13.5" (342.6 mm)
	Depth	15.9" (405 mm)
Dimensional drawing number		With iTouch: MS500213; without touch: MS500214
Highest recommended resolution		1024 x 768 at 85 Hz
Resolution presets		1024 x 768 at 85 Hz (VESA); 800 x 600 at 85 Hz (VESA); 640 x 480 at 60 Hz (VGA)
Dot pitch, nominal		0.27 mm
Video bandwidth		100 MHz (–3 db)
Scanning frequency		Horizontal 30–70 kHz; vertical 50–160 Hz
Input video format/connector		Analog; Mini D-Sub 15-Pin (female)
Input power connector		Universal "Mate-N-Lok," AMP P/N 350766
Power supply		100–240 VAC, 50–60 Hz
Power dissipation		65 W typical, 75 W max.
Temperature		Operating 5°C to 55°C; storage –20°C to 60°C
Humidity		Operating 10% to 80%
Weight (approx.)		Actual 27.8 lb (12.6 kg); shipping 34.4 lb (15.6 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch
		Watertight minibezel; diagnostic LED; multilingual remote on-screen display (OSD); built-in power, deflection, and video test; video diagnostic pin; ENERGY STAR; VESA DPMS; VESA DDC 1/2 B Plug and Play
Other features, touch		Diagnostic LED

ORDERING INFORMATION: TOUCHMONITORS AND ACCESSORIES

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
iTouch	Serial	Antireflective	375460-000	FCC/ICES-03: Class B, UL/cUL (*Recognized component), CE, VCCI, C-TICK, MPR II, DHHS, Demko

Accessories	Elo Part Number
Bracket	P/N A44380-000
Power cables	P/N 918850-000
Repair kit	P/N 408678-000
Square bezel	P/N A71324-000

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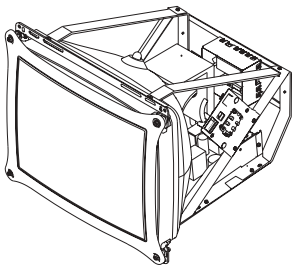
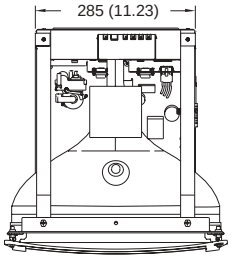
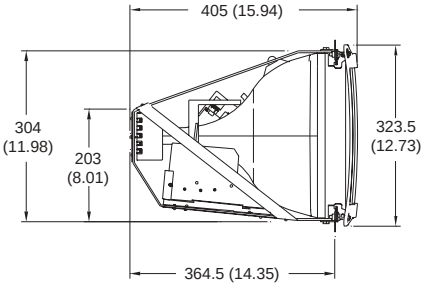
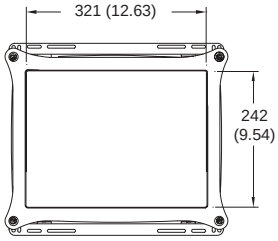
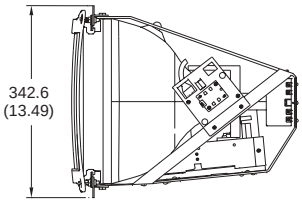
3000 Series
17" CRT Touchmonitor

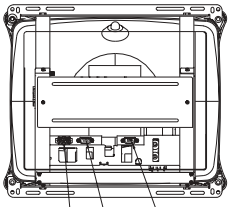


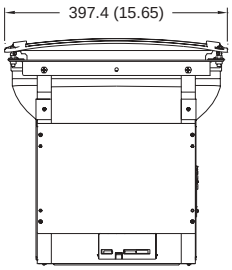












*Use AMP 350767 Mating
Mate & Lock Connector.

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Touchmonitors

1788C Open Frame

3000 Series 17" True Flat CRT Touchmonitor

SPECIFICATIONS

Model		1788C
Case/Bezel color		Metal open frame
Display type		True flat
Display size		17" diagonal
Display area dimensions, nominal	Default	11.8" (300 mm) H x 8.9" (225 mm) V
Monitor dimensions	Width	15.9" (403 mm)
	Height	13.5" (343 mm)
	Depth	16.1" (410 mm)
Dimensional drawing number		MS500315 (available at www.elotouch.com)
Highest recommended resolution		1024 x 768 at 85 Hz
Resolution presets		1024 x 768 at 85 Hz; 800 x 600 at 85 Hz; 640 x 480 at 60 Hz
Dot pitch, nominal		0.25 mm
Video bandwidth		100 MHz
Scanning frequency		Horizontal 30–70 kHz; vertical 50–160 Hz
Input video format/connector		Analog (no proprietary video card needed); Mini D-Sub 15-Pin (female)
Input power connector		Universal "Mate-N-Lok," AMP P/N 350766
Power supply		100–240 VAC, 50–60 Hz
Power dissipation		65 W typical, 75 W max.
Temperature		Operating 5°C to 55°C; storage –20°C to 65°C
Humidity		Operating 10% to 80%; storage 5% to 95%; noncondensing
Weight (approx.)		Actual 37.5 lb (17.0 kg); shipping 45.0 lb (20.4 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch
		Watertight minibezel; diagnostic LED; multilingual remote on-screen display (OSD); built-in power, deflection, and video test; video diagnostic pin; ENERGY STAR; 2 stage DPMS; VESA DDC; Plug and Play

ORDERING INFORMATION: TOUCHMONITORS AND ACCESSORIES

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
iTouch	Serial	Antireflective	D07427-000	FCC/ICES-03: Class B, UL/cUL (*Recognized component), TÜV-Bauart, CE, VCCI, C-TICK, MPR II, DHHS, Demko

Accessories	Elo Part Number
Bracket	P/N A44380-000
Power cables	P/N 918850-000
Repair kit	P/N D92272-000

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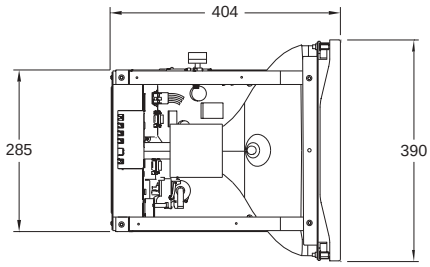
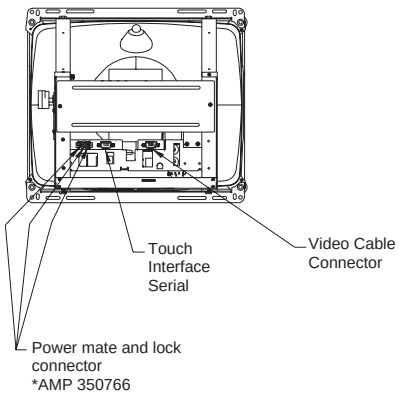
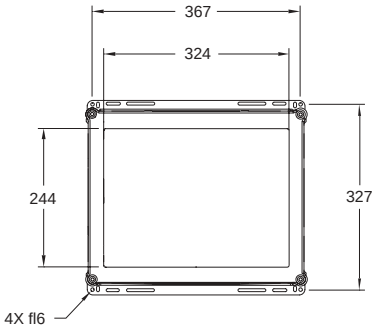
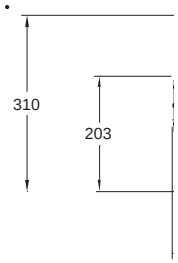
3000 Series
17" True Flat CRT
Touchmonitor









entuitive Touchmonitors

1987C

Open Frame

3000 Series
19" CRT Touchmonitor

SPECIFICATIONS

Model		1987C
Case/Bezel color		Metal open frame/black
Display type		FST CRT
Display size		19.0" diagonal
Display area dimensions	Default	14.2" (360 mm) H x 10.6" (270 mm) V
Monitor dimensions	Width	16.7" (424 mm)
	Height	14.75" (374.7 mm)
	Depth	17.3" (440 mm)
Dimensional drawing number		With iTouch: MS500215; without touch: MS500216
Highest recommended resolution		1024 x 768 at 85 Hz
Resolution presets		1024 x 768 at 85 Hz (VESA); 800 x 600 at 85 Hz (VESA); 640 x 480 at 60 Hz (VGA)
Dot pitch, nominal		0.25 mm
Video bandwidth		100 MHz (–3 db)
Scanning frequency		Horizontal 30–70 kHz; vertical 50–160 Hz
Input video format/connector		Analog; Mini D-Sub 15-Pin (female)
Input power connector		Universal "Mate-N-Lok," AMP P/N 350766
Power supply		100–240 VAC, 50–60 Hz
Power dissipation		75 W typical, 85 W max.
Temperature		Operating 5°C to 55°C; storage –20°C to 65°C
Humidity		Operating 10% to 80%
Weight (approx.)		Actual 39.2 lb (17.8 kg); shipping 48.0 lb (21.8 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch
Other features, video		Watertight minibezel; diagnostic LED; multilingual remote on-screen display (OSD); built-in power, deflection, and video test; video diagnostic pin; ENERGY STAR; VESA DPMS; VESA DDC 1/2 B Plug and Play
Other features, touch		Diagnostic LED

ORDERING INFORMATION: TOUCHMONITORS AND ACCESSORIES

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
iTouch	Serial	Antireflective	E03176-000	FCC/ICES-03: Class B, UL/cUL (*Recognized component), CE, VCCI, C-Tick, MPR II, DHHS, Demko

Accessories	Elo Part Number
Bracket	P/N A44380-000
Power cables	P/N 918850-000
Repair kit	P/N F34044-000
Square bezel	P/N F45987-000

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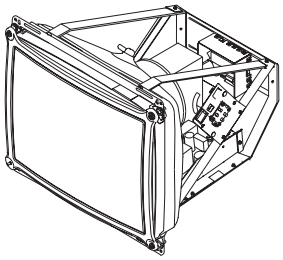
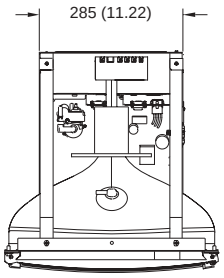
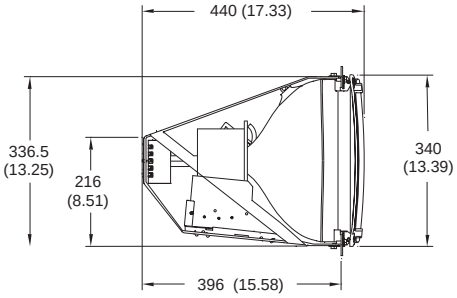
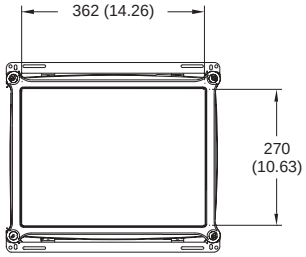
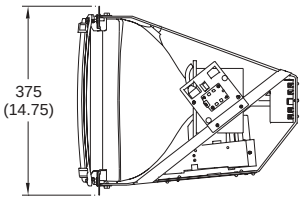
3000 Series
19" CRT Touchmonitor

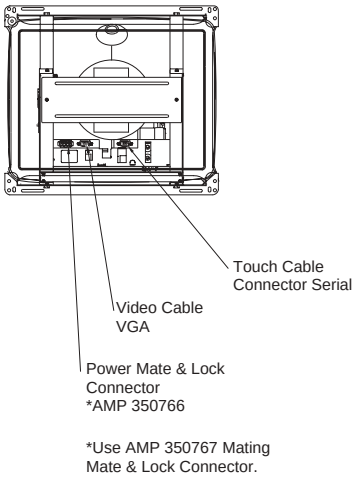


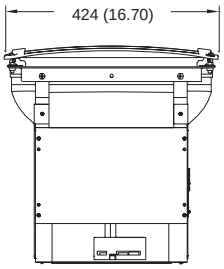












entuitive Touchmonitors

1988C Open Frame

3000 Series 19" True Flat CRT Touchmonitor

SPECIFICATIONS

Model		1988C
Case/Bezel color		Metal open frame
Display type		True flat
Display size		19" diagonal
Display area dimensions	Default	14.2" (360 mm) H x 10.6" (270 mm) V
Monitor dimensions	Width	17.0" (431 mm)
	Height	14.8" (375 mm)
	Depth	17.6" (446 mm)
Dimensional drawing number		MS500314 (available at www.elotouch.com)
Highest recommended resolution		1024 x 768 at 85 Hz
Resolution presets		1024 x 768 at 85 Hz; 800 x 600 at 85 Hz; 640 x 480 at 60 Hz
Dot pitch, nominal		0.25 mm
Video bandwidth		100 MHz
Scanning frequency		Horizontal 30–70 kHz; vertical 50–160 Hz
Input video format/connector		Analog (no proprietary video card needed)
Input power connector		Universal "Mate-N-Lok," AMP P/N 350766
Power supply		100–240 VAC, 50–60 Hz
Power dissipation		75 W typical, 85 W max.
Temperature		Operating 5°C to 55°C; storage –20°C to 65°C
Humidity		Operating 10% to 80%; storage 5% to 95%; noncondensing
Weight (approx.)		Actual 43 lb (19.5 kg); shipping 50.0 lb (22.7 kg)
Warranty	Monitor	2 years
	Touch technology	2 years iTouch
		Watertight minibezel; diagnostic LED; multilingual remote on-screen display (OSD); built-in power, deflection, and video test; video diagnostic pin; ENERGY STAR; 2 stage DPMS; VESA DDC 1/2 B Plug and Play

ORDERING INFORMATION: TOUCHMONITORS AND ACCESSORIES

Touch Technology	Touch Interface	Surface Treatment	Elo Part Number	Agency Approvals
iTouch	Serial	Antireflective	E96061-000	FCC/ICES-03: Class B, UL/cUL (*Recognized component), CE, VCCI, C-TICK, MPR II, DHHS, Demko

Accessories	Elo Part Number
Bracket	P/N A44380-000
Power cables	P/N 918850-000
Repair kit	P/N D42279-000

- Users should independently evaluate the suitability of the product for their application.
- All prices, models, and availability subject to change without notice.
- Stock quantities may be limited. Larger quantities are available within one week.
- For Product Agency Certifications refer to our Web site.

tyco Electronics

elo TOUCHSYSTEMS

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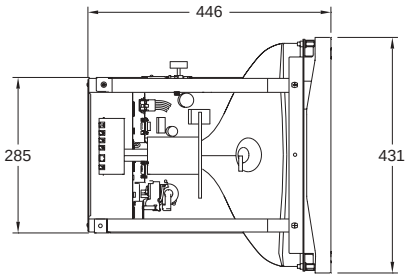
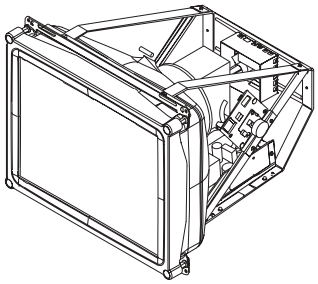
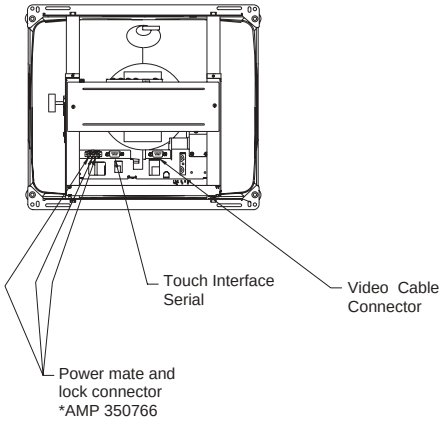
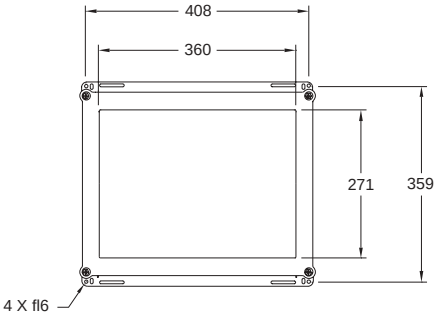
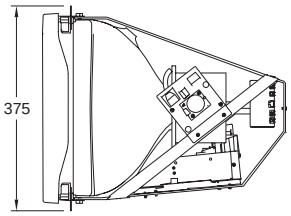
3000 Series
19" True Flat CRT
Touchmonitor

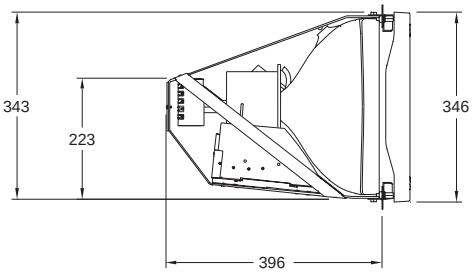


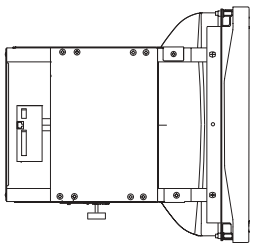




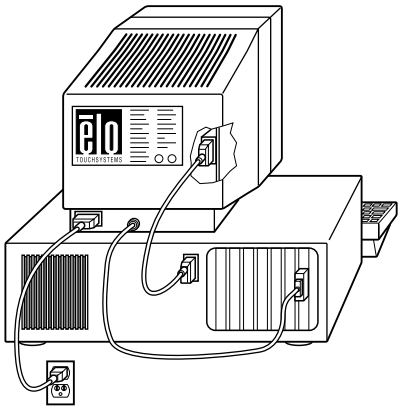


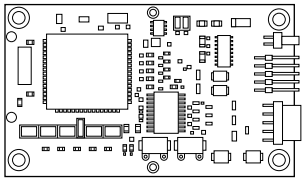




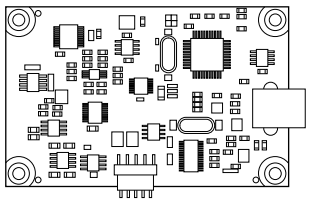


Cables, Controllers, Drivers, and Accessories





Serial controller



USB controller

AccuTouch/IntelliTouch Internal Serial or USB touchmonitors

For PC-based computers, cables are included with purchase of the touchmonitor.

For Apple Legacy (pre-G3) computers, additional cables must be purchased separately:

632851-000 VGA to Macintosh video
084037-000 DB-9 to 8-pin mini-DIN

AccuTouch Serial and USB Controller

Order the AccuTouch serial controller card: 055165-000
Options:
734849-000 Internal mounting kit
742067-000 AC to DC power supply kit

Order the AccuTouch USB controller card: 608244-000
Options:
310900-000 Cable pack

IntelliTouch Serial and USB Controller

Order the IntelliTouch serial controller card: 351077-000
Options:
750345-000 Cable pack
934201-000 Mounting kit
742067-000 AC to DC power supply kit (for both controllers)

Order the IntelliTouch USB controller card: 714259-000
Options:
748578-000 Cable pack

MonitorMouse touchscreen drivers

Elo's industry-leading touchscreen driver software is included with the hardware. When ordering, please specify your operating system(s). The latest drivers and manuals are free for Elo customers and may be downloaded from our Web site: www.elotouch.com.

ORDERING INFORMATION

Driver Software	Elo Part Number
Elo TouchTools CD-ROM (includes all software drivers, manuals, and documentation)	**450261-000**

Technical Manuals

Up to 24 hardcopy manuals are provided free upon request with hardware orders. Electronic copies and manuals are downloadable from www.elotouch.com.

Manuals	Elo Part Number
AccuTouch Product Manual	821615-000
IntelliTouch Ultra Product Manual	201077-000
SmartSet Technical Reference Controller Manual	676553-000

Stylus	Elo Part Number
IntelliTouch stylus	683550-000

Elo's TouchTools MonitorMice

Elo's MonitorMice software provides a multi-user touch interface from one PC running most Windows-based operating systems.

MonitorMice software

Elo TouchSystems' MonitorMice software provides a multi-user touch interface from a multi-user operating system, for most Windows-based operating systems. System costs are significantly reduced for a range of markets and applications:

- Point-of-information kiosks
- Process control
- Financial
- Education and training
- Point-of-sale terminals

Using Elo's patented MonitorMice software and multiple video sources, you can spread one Windows desktop across two or more monitors and have a separate application running in a window on each monitor. The end result can be as many as four independent, touch-activated applications running simultaneously on one PC under most Windows-based operating systems.

The multi-user software is an extension of Elo's Monitor-Mouse line that allows a touchscreen to work like a mouse on each touchmonitor. Previously, each touchscreen required its own PC.

Multi-user mode

In this mode the screen responds to a touch as it would to a single mouse click. Simultaneous touches on multiple monitors are recognized and processed without perceptible delay.

A single PC running Windows on multiple displays can be used in many applications:

- Kiosk "clusters" at airports, trade shows, and cyber cafés, to allow several people to use the kiosk software at the same time
- Factories, to operate and control manufacturing processes from multiple locations
- Employment offices, to provide simultaneous job-search capabilities from several stations
- Fast-food restaurants, to allow order-taking at multiple stations

Single-user mode

Drag-and-drop, double-clicking, and pull-down menu functions can be activated by touch when MonitorMice software is operated in single-user mode. For example:

- A financial trader working with three or four monitors can touch an item on one screen, then touch a second screen to which the item should be moved. When the finger is lifted from the first screen, the object automatically moves to the second.
- In a doctor's office, a single computer can drive monitors located in different patient rooms. The doctor can pull up patient records, billing data, and medical histories from any of these locations. Without MonitorMice, a computer with a network connection would have been required in each room.

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Glossary of "Touch" Terms and Related Technical Terminology

actual image size
The size of the display on the screen is dependent upon the signals provided by the video card. The displayable diagonal measurement can vary, depending on how the graphics mode is generated and how the monitor responds to the characteristics of the video signal.

aperture grille
Aperture grille technology employs a series of thin, closely spaced vertical wires to isolate pixels horizontally. The pixels are separated vertically by the nature of the scan lines (beams) used to compose the image.

bandwidth
A measure of the display performance of a monitor. Expressed in MHz, bandwidth is the number of dots that can be displayed in a line per second. More strictly, it is the frequency response of the system between points where the signal level falls to a specified percentage of its maximum value (usually 50% or 75%). In principle, the greater the bandwidth, the better the monitor—although the quality of the picture tube is often the limiting factor affecting display performance, and for many standard monitors there is little point in increasing the bandwidth beyond a certain point. Typical bandwidths for monitors (Spring 2003) are as follows:

VGA monitors: 18 MHz
FGA+ monitors: 35 MHz
CAD monitors: 100 MHz

Bauart
Component products can be Bauart certified by TÜV for expected safety concerns, meaning evaluation to German and European Union standards for building into other equipment. Typical component products are touchscreens, controllers, and kiosk or frame touchmonitors.

brightness
Light output measured at the faceplate of the CRT; typically measured in footlamberts (Fl). A minimum brightness level of 20 Fl when viewing a full-sized page is considered acceptable.

CD-ROM
Compact Disc Read-Only Memory. A CD-ROM is any compact disc that contains computer data. "ROM" means that you cannot save information onto these discs. These discs can hold huge amounts of data (up to 640 megabytes). If there is a large amount of data on a CD-ROM, then it is usually impractical to copy the data onto the hard disk; in this case, you must insert the disc into the drive whenever you want to use the data. CD-ROM may also refer to the drive used to read these discs.

CE
The CE (Conformite Europeene) marking on end products indicates compliance with all applicable directives. For information technology equipment (ITE) this typically means Low Voltage Directive 73/23/EEC (LVD), and the EMC Directive 89/336/EEC. Typical end products are desktop touchmonitors.

Components typically do not carry the European Union's CE marking. Properly applied, they will comply with the LVD and EMC Directives. Typical component products are touchscreens, controllers, and kiosk touchmonitors. Refer to the product Declaration of Conformity (DOC) for test levels.

contrast
The ratio between the maximum and the minimum brightness of the display.

contrast control
A manual gain control for a monitor, affecting both luminance and contrast.

C-Tick
A trademark registered to the Australian Communications Authority, indicating compliance with the electromagnetic radiation emissions limits of Australia and New Zealand.

CRT
Cathode ray tube. Also known as picture tube or screen. A picture tube in a TV is also a CRT.

DDC
Display Data Channel. A VESA standard for communication between a monitor and a video adapter. Using DDC, a monitor can inform the video card about its properties, such as maximum resolution and color depth. The video card can then use this information to ensure that the user is presented with valid options for configuring the display.

DDC2B
VESA standard bidirectional digital data channel between the display and the host. The host initiates data transfer by reading the EDID from a memory location in the display. *See also* **DDC** *and* **EDID.**

digital control
Microprocessor-based digital control of picture parameters and video modes for complete control of picture settings and modes and instant recall of all settings at the push of a button. This very advanced feature allows the user to switch to any required mode at any moment without having to spend time readjusting the picture.

dot pitch
The distance between one phosphor dot (i.e., red, green, or blue) and the nearest phosphor dot of the same color in the line above or below.

DPMS
Display Power Management Signaling. A VESA standard that ensures that monitor and video card manufacturers produce power-saving products that work together.

drive
Any data storage device including CD-ROM drive, floppy disk drive, and hard disk drive.

EDID
Extended Display Identification Data. A VESA standard for data structures containing the display identity and the basic display specifications.

electronic radiation standards
International standards established to limit electromagnetic emissions from monitors. There are currently two important standards, both derived from regulations originally established by the Swedish authorities. *See also* **MPR II** *and* **TCO.**

EMC
Electromagnetic compatibility. EMC requirements stipulate that a device shall not cause interference within itself or in other devices, or be susceptible to interference from other devices. The European Union was the first governing body to establish laws (CE) regarding immunity of devices from EMI. *See also* **CE, EMI,** *and* **RFI.**

EMI
Electromagnetic interference. This interference in the operation of a device is caused by incompatibility with ambient signals. Common sources of EMI include transmitters and receivers (radio, TV, cell phone), power mains (lightning, surges, brownouts), appliances, computer oscillators, and electrostatics. Many countries have established laws (such as FCC and CE) governing EMI source limits. *See also* **CE, FCC, EMC,** *and* **RFI.**

ENERGY STAR®
A voluntary partnership between the U.S. Department of Energy, the U.S. Environmental Protection Agency, product manufacturers, local utilities, and retailers. ENERGY STAR labeled products use less energy than other products. Partners help promote energy-efficient products by labeling with the ENERGY STAR logo and educating consumers about the benefits of energy efficiency.

FCC Class A
A marking FOR OFFICE USE means the design has been tested for compliance with the U.S. Federal Communications Commission's (FCC) Part 15 Class A RF emissions limits, and is suitable for use in nonresidential settings. Industry Canada's RF emissions limits are identical to the FCC's. *See also* **IC Class A.**

FCC Class B
A marking FOR HOME OR OFFICE USE means the design has been tested for compliance with the U.S. Federal Communications Commission's (FCC) Part 15 Class B RF emissions limits, and is suitable for use in residential or nonresidential settings. Industry Canada's RF emissions limits are identical to FCC's. *See also* **IC Class B.**

flat square screen
A screen that is flatter and more square than the conventional CRT screen. The flatter outline reduces picture distortion and ambient reflections, and allows better use to be made of the screen area.

flicker
Condition of the display caused by the mismatch of vertical and horizontal refresh rates, when a phosphor's illumination begins to decay prior to being refreshed. The resulting flicker is particularly detectable with peripheral vision. Flicker can be eliminated by increasing the refresh rate to a value at or above 70 Hz.

frequently asked question(s) (FAQ)
A list of questions/answers provided by companies related to their products or Web site.

GS
A German certification, Geprufte Sicherheit ("tested safety"). End products can be GS-certified by TUV for expected safety concerns, meaning they have been evaluated and have met German standards. Typical end products are desktop touchmonitors.

hard disk
A storage device inside a computer, generally designated as the C: drive. It cannot be seen without opening up the computer; however, usually a light on the front of the computer shows when the hard disk is being accessed.

hertz
The unit of frequency named after the physicist Heinrich Hertz (1857–1894). One hertz (Hz) is equal to one cycle/second.

horizontal frequency
The time it takes to scan each of the horizontal lines that make up the display, measured in kilohertz (kHz). Horizontal frequency is directly related to the vertical refresh rate, so that the greater the number of vertical lines, the higher the horizontal frequency required.

horizontal scanning frequency
The number of video lines written on the screen every second (from left to right); also called line frequency and expressed in kHz. The higher the horizontal scanning frequency, the higher the resolution and/or the refresh rate,

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which produces a more stable image, helping to reduce user eyestrain and fatigue.

I2C bus: access bus standard
A standard-protocol two-wire (clock and data) serial data bus.

IC Class A
A Class A compliance statement means the design has been tested for compliance with Industry Canada's ICES 03 Class A RF emissions limits and is suitable for use in non-residential settings. Industry Canada's RF emissions limits are identical to the FCC's. *See also* **FCC Class A.**

IC Class B
A Class B compliance statement means the design has been tested for compliance with Industry Canada's ICES 03 Class B RF emissions limits, and is suitable for use in residential or nonresidential settings. Industry Canada's RF emissions limits are identical to the FCC's. *See also* **FCC Class B.**

interlaced scanning mode
A scheme that takes two passes to paint an on-screen image, painting every other line on the first pass and sequentially filling in the rest of the line on the second pass. This scheme usually causes flicker. *See also* **noninterlaced scanning mode.**

Invar shadow mask
A special type of shadow mask, made out of Invar and alloy, that is able to withstand the high temperature generated by the electron beam. The Invar shadow mask allows the CRT to generate a brighter image than with the conventional shadow mask. An advanced Invar shadow mask improves brightness by 40 percent over the standard.

ISO 9241 part 3
An ergonomic standard that covers hardware, software, workplace, and environment. It addresses the actual application at the workplace. The objective of part 3 is to ensure that the CRT display shall be legible, readable, and comfortable in use.

linearity
The degree to which the actual location of a pixel on the screen corresponds with its intended location. Nonlinearity causes screen images to be more distorted in one area of the screen than in another. This is sometimes caused by poor voltage regulation in the monitor's electronics.

magnetic field effects (MFE)
A monitor is affected by magnetic fields. When a screen develops wrong colors in certain areas, or the picture becomes distorted, check what is located near the monitor. A steel cabinet, desk, bench, or steel girder imbedded in a wall or ceiling could cause distortion of the picture tube's electron beams due to an impeding magnetic field. Moving the monitor approximately 3 feet away from the suspected source can clear the problem, as can degaussing it. Speakers should also be considered as a possible source of distortion, since they may also create a magnetic field when powered on.

memory
In technical references, the word memory used by itself refers to random access memory (RAM).

modem
A device that allows one computer to communicate with another over phone lines. It can be inside a computer (internal) or external. All modern modems are also capable of sending and receiving faxes with the use of fax software.

MPR II
A set of Swedish safety standards that covers the levels of magnetic and electrical fields in both VLF and ELF ranges. The Swedish National Board for Measurement and Testing (SWEDAC) requires that products sold in Sweden comply with MPR II. To measure emissions, a sophisticated test that screens out background radiation must be in place. Since distance to the CRT and orientation of the measuring device affect measurement, precise placement of the measuring device is essential and difficult to repeat. In addition, the actual image displayed can have an impact on emissions, so that a given set of measurements may not predict the emissions a user would actually encounter. It is worth noting that there are no scientific studies that conclude that measurements above MPR II levels are hazardous. *See also* **TCO.**

noninterlaced (NI) scanning mode
A scheme for assembling an image on the screen by painting all the lines in one pass, then painting an entirely new frame. Noninterlaced scanning mode reduces flicker. *See also* **interlaced scanning mode.**

operating system (OS)
The program that runs a computer. The operating system takes care of managing files and folders (such as renaming, moving, copying, and deleting files). It also provides the ability to start the other software you have on your computer. Operating systems also usually include many programs, such as a text editor, that are almost essential to have on every computer.

opto-electronics
Infrared-light-emitting diodes (LEDs) and photo transistors used for touch-sensing in infrared (IR) touchscreens.

opto-matrix frame
Used in infrared (IR) touchscreens. The touch frame contains two opposite rows of IR-light-emitting diodes (LEDs) and photo transistors, collectively referred to as opto-electronics, concealed behind an IR-transparent bezel.

phosphor
Chemical compound that emits light when excited by electrons.

pixel
Abbreviation for picture element, the smallest element of the picture that can be displayed on the screen. Each pixel contains one red, one blue, and one green phosphor.

PDF file (Adobe® Portable Document Format)
A universal file format that preserves the fonts, formatting, colors, and graphics of any source document, regardless of the application and platform used to create it. PDF is the open de facto standard for distributing formatted documents over the Internet. PDF files are compact and can be shared, viewed, navigated, and printed using free Adobe Acrobat® Reader® software, downloadable from http://www.adobe.com. Documents can be converted into PDF files with Adobe Acrobat 5.0 software.

point of information (POI)
The location at a facility where visitors seek information.

point of sale (POS)
The location at a merchant's facility where customer make purchases.

POS terminal
A device placed in a merchant location, connected to the bank's system or authorization service provider via telephone lines, and designed to authorize, record, and forward data for each sale by electronic means.

RAM
Random access memory. In technical references, this is often simply referred to as memory. A computer's memory is not like its hard disk, which is permanent storage. Memory can only store information while the computer is on; however, it is much faster than a hard disk. A hard disk is a mechanical device, but memory is stored on computer chips, and information can be accessed from anywhere on the chip almost instantly.

refresh rate
Number of times the screen can be redrawn per second—an ergonomic issue directly related to long-term ease of use. A higher refresh rate means a less "flickering" display, resulting in less eyestrain and fatigue. Bandwidth, horizontal scanning rate, and vertical scanning rate work together to determine both the resolution and the refresh rate.

resolution
The number of pixels that can be displayed on a screen, specified as the number of pixels in a horizontal line multiplied by the number of horizontal lines. For example, a resolution of 800 x 600 is 800 pixels running horizontally and 600 pixels running vertically—a total of 480,000 pixels.

RF
Radio frequency. It consists of electromagnetic waves at a frequency between audio and infrared, used primarily in radio and television transmission.

RFI
Radio frequency interference. This interference in the operation of a device is caused by incompatibility with ambient RF signals. *See also* **EMC, EMI,** *and* **RF.**

RS-232 port
A standardized serial port for connecting a computer to peripheral equipment, such as a printer, mouse, scanner, modem, or touchscreen.

screen size versus viewable image size
Screen size is the total size, measured diagonally, of the monitor screen before it is placed in the monitor cabinet. Viewable image size is the size, measured diagonally, of the monitor screen that can be viewed once it is in the cabinet.

stripe pitch
The equivalent of dot pitch on aperture grille tubes—the distance between one stripe and the next one of the same color, expressed in millimeters.

TCO95 and TCO99
A standard set by the Swedish Tjänstemännens Central Organization (TCO) in 1991. It is even more stringent than MPR II, especially for alternating electric fields (AEF). Not only are the permitted field levels reduced compared with MPR II, but the measuring distance is reduced as well. Ergonomic and ecologic requirements are included for TCO95. For TCO99, it is expanded to include more ergonomic and ecologic requirements. *See also* **MPR II.**

tilt
The angle of the CRT with respect to the horizontal-mounting bracket of the chassis. Tilt can vary, depending on the monitor's orientation to the earth's magnetic poles. Monitor manufacturers orient and align their products in the eastern direction. When the monitor is facing a north/south direction, there may be a slight rotation of the image.

UL/cUL Listed
End products can be Listed by Underwriters Laboratories for expected safety concerns. The CNL/USL designation in the certification indicates evaluation to U.S. and Canadian standards. Typical end products are desktop touchmonitors.

UR/cUR Recognized components
Component products can be Recognized by Underwriters Laboratories for expected safety concerns. The CNR/USR

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Glossary of "Touch" Terms and Related Technical Terminology

designation in the certification indicates evaluation to U.S. and Canadian standards. Typical end products are touchscreens, controllers, and kiosk touchmonitors.

USB
Universal Serial Bus, an external bus standard that supports data transfer rates of 12 Mbps (12 million bits per second). A single USB port can be used to connect up to 127 peripheral devices, such as mice, modems, and keyboards. USB also supports Plug and Play installation.

user-friendly
Describes an interface—Web site, equipment, process—that people find easy to use, or intuitive.

VCCI
A Japanese standard for RF emissions developed by the Voluntary Control Council for Interference. The VCCI marking on an end product indicates it has been tested for compliance with the VCCI program.

vertical frequency
The number of times per second that the monitor can draw all the lines on the entire screen. A higher vertical frequency or refresh rate will reduce flicker, helping to reduce user eyestrain and fatigue.

vertical scanning frequency
In interlaced mode, the number of fields written to the screen every second, expressed in Hz. In noninterlaced mode, it is the number of frames (complete pictures) written to the screen every second (also known as **refresh rate**). A higher vertical frequency or refresh rate will reduce flicker, helping to reduce user eyestrain and fatigue.

VESA
Video Electronic Standards Association, a consortium of manufacturers formed to establish and maintain industry-wide standards for video cards and monitors. VESA was instrumental in the introduction of the Super VGA and Extended VGA video graphics standards with a refresh rate of 70 Hz, minimizing flicker and helping to reduce user eyestrain and fatigue. *See also* **video graphics adapters.**

video bandwidth
See **bandwidth.**

video graphics adapter (VGA)
A card with character generator and an array of microprocessors that translate bit information from the computer into displayable video signals for the monitor. These cards comply with various standards that determine the nature of the quality of the display.

VGA, introduced in 1987, was the first analog card. It offered still higher resolution than enhanced graphics adapter (EGA)—640 x 480 pixels for graphics and 720 x 400 pixels for test—and a color palette of 256 colors. VGA could also emulate EGA and color/graphics adapter (CGA).

Super VGA (SVGA), devised by VESA in 1989, offers a resolution of 800 x 600 pixels.

XGA-8514A, introduced by IBM in 1990, offers a resolution of 1024 x 768 pixels (interlaced) and a color palette of 256 colors.

Extended VGA (XVGA), introduced by VESA in 1991, offers a top resolution of 1024 x 768 pixels (noninterlaced) and a refresh rate significantly higher than that of IBM's XGA-8514A.

High-end graphics adapters, introduced in the late 1990s for professional workstations, offer top resolutions from 1280 x 1024 to 1600 x 1280, horizontal line frequencies up to 90 kHz, and bandwidths up to 200 MHz.

video signal
The output from the video graphics adapter incorporating the red (R), green (G), and blue (B) signals and the luminance signal, or combinations of these signals, that pass to the video input of the monitor.

viewable image size (VIS)
Actual maximum viewable image size is dependent upon the size of the plastic or bezel around the CRT. Typically, the maximum possible for a "17-inch" monitor is actually 15.75 inches, plus or minus 0.25 inch at the ends of diagonal measurement. VIS differs from diagonal linear measurement.

VRAM/video memory
Random access memory for storing video information. VRAM is a special-purpose RAM with two data paths for access rather than the one path of a conventional RAM. The two paths let the VRAM handle two tasks simultaneously: display refresh and process access. VRAM does not force the system to wait for one function to finish before starting another, so it permits faster operation for the video subsystem.

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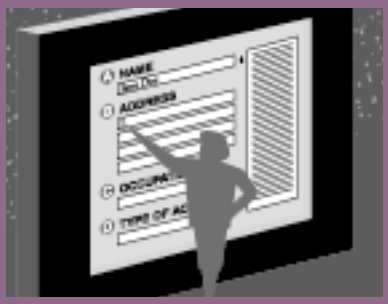

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